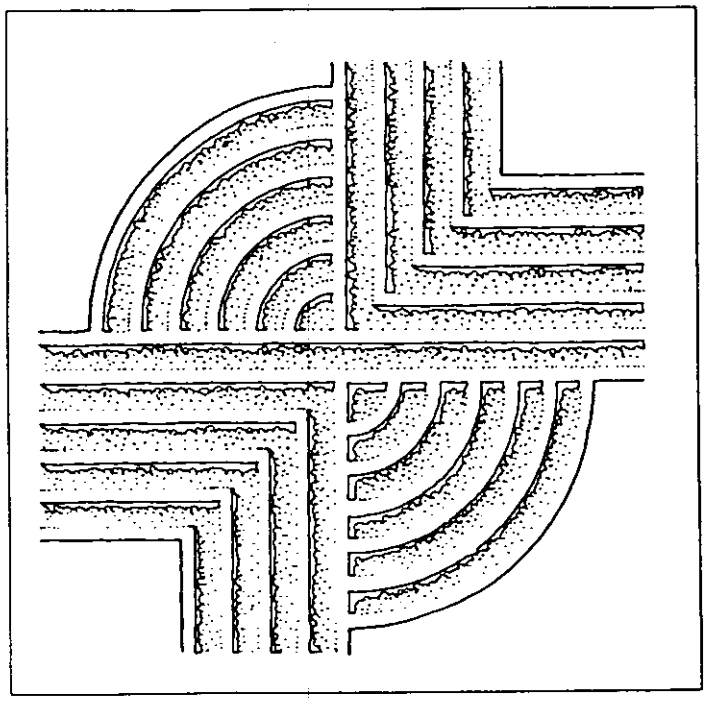
# MANAGEMENT SUMMARY OF ARCHAEOLOGICAL DATA RECOVERY AT A PORTION OF CROWFIELD PLANTATION (38BK103) AND ITS SLAVE SETTLEMENT (38BK1011), BERKELEY COUNTY, SOUTH CAROLINA



**CHICORA RESEARCH CONTRIBUTION 205**

# MANAGEMENT SUMMARY OF ARCHAEOLOGICAL DATA RECOVERY AT A PORTION OF CROWFIELD PLANTATION (38BK103) AND ITS SLAVE SETTLEMENT (38BK1011), BERKELEY COUNTY, SOUTH CAROLINA

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# ABSTRACT

The initial archaeological survey of the 2,372 acre Crowfield tract by Garrow and Associates identified a number of significant historic resources, including the main plantation complex (38BK103) and its associated slave settlement (38BK1011). A Memorandum of Agreement (MOA) for these two sites was signed and in 1990 Law Environmental conducted limited test excavations at the two sites. In 1992 Chicora Foundation worked with Hugh Dargan and Associates to develop a preservation plan for a portion of the main settlement. In 1995 Chicora was requested by Westvaco Development Corporation to conduct data recovery excavations at portions of the main settlement, as well as in the slave settlement. A proposal was prepared and received detailed review by the S.C. State Historic Preservation Office, the Army Corps of Engineers, and the Advisory Council for Historic Preservation.

Archaeological data recovery excavations were conducted at portions of 38BK103 and at 38BK1011 in January and February 1996. Limited additional historical research was conducted during the summer of 1996. The collections were cataloged and analyzed in mid- to late-1996. Some studies, such as a chemical and petrographic examination of the Colono ware sherds are still on-going.

The document provides a preliminary overview of the excavations, outlining the methodology employed and at least some of the initial findings. No detailed analysis of collections, however, is offered as this will be discussed in more detail in the final report.

Perhaps the most outstanding feature of these excavations includes the recovery of a variety of slave housing types, all associated with an amorphous, or very loosely clustered, settlement southwest of the main plantation complex. The range of construction, and size, of the various structures far exceeds what has been previously recorded for eighteenth century slave complexes in South Carolina.

But beyond this, the excavations reveal an assemblage that is almost entirely Colono ware pottery, indicating slaves living with very few European items. Our analysis of this Colono ware is focusing on typological and functional issues — exploring the typological attributes of the collection, collecting thin section data for the wares, examining the chemical composition of the paste, and reconstructing morphological attributes of the pottery.

Also revealed by the excavations is the complexity of the main plantation settlement. Several buildings were explored which are rarely encountered in the CRM literature of eighteenth century plantations. These findings suggest that the plantation reconstructions resulting from many cultural resource activities are far too flat and on-dimensional, presenting very biased views of the plantation landscape.

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# INTRODUCTION

## The Site Area

The Crowfield settlement is situated in the lower western section of Berkeley County about 6 miles east of Summerville and 12 miles north of Charleston (Figure 1). The bulk of the historic settlement is found on about 15 acres within Westvaco Development's Crowfield Planation development.

Although historically wooded, the tract is today surrounded by single family homes, a golf course, and additional planned development. It is characterized by a range of soils. The Norfolk sand loams and Goldsboro loamy sands are well drained to moderately well drained and form an "island" on which much of the historic settlement is situated. Surrounding it, however, are the Lynchburg fine sandy loams, Meggett loams, and Ocilla loamy fine sands, which are all somewhat poorly drained to poorly drained (Long 1980:Map 86).

## Previous Investigations at Crowfield

### Early Survey Level Research

Crowfield was initially recorded as an archaeological site in 1974 by Mr. Travis Bianchi with the South Carolina Institute of Archaeology and Anthropology. A small assortment of historic artifacts were collected and the site form also mentions the brick house ruins, the two flanker ruins, and two outlying brick foundation ruins (38BK103 site form, S.C. Institute of Archaeology and Anthropology).

The site was re-visited as part of a reconnaissance level survey in 1978 (Poplin et al. 1978). Another small collection was made from limited shovel testing and the authors briefly noted the main house and associated gardens.

In 1987 the 2,372 acre Crowfield Tract was subjected to an intensive survey by Garrow and Associates (Elliott 1987). Elliott remarks that logging, conducted in 1985, had dramatically changed the appearance of the site:

> Log skidder paths, varying in depth, criss-cross the site. Vandalism had occurred to portions of the site, and consisted of indiscriminately placed shovel holes scattered over the site and systematic mining of two areas along the flankers (Elliott 1987:70).

He established a site grid (the same one used today) and excavated approximately 330 shovel tests at 80 foot intervals in the vicinity of the Crowfield settlement (Figure 2). Five 2-foot tests were excavated at 38BK103, revealing an assemblage dominated by Colono wares (which accounted for 77.3% of the Kitchen assemblage). In addition, Elliott found that fewer than five of his artifacts clearly post-dated the eighteenth century. He defined the site as encompassing an area measuring about 1,760 feet north-south by 1,200 feet east-west (Elliott 1987:71)

In addition, Elliott encountered what he described as another site, "immediately south and west of 38Bk103." Provisionally called Site 31, this is now known as 38BK1011, although the boundaries have changed with subsequent investigations. Shovel tests were excavated at 25 m intervals, revealing a site measuring 488 feet north-south by 894 feet east-west (Elliott 1987:79; see Figure 3). In essence, Elliott extended 38BK103 to just south of the two brick ruins and westward across the upland bog, creating a straight (and arbitrary) east-west boundary with 38BK1011. At this site the Colono wares were even more common, representing 96.6% of the ceramic collection (Elliott 1987:83).

Slightly removed from 38BK1011 was

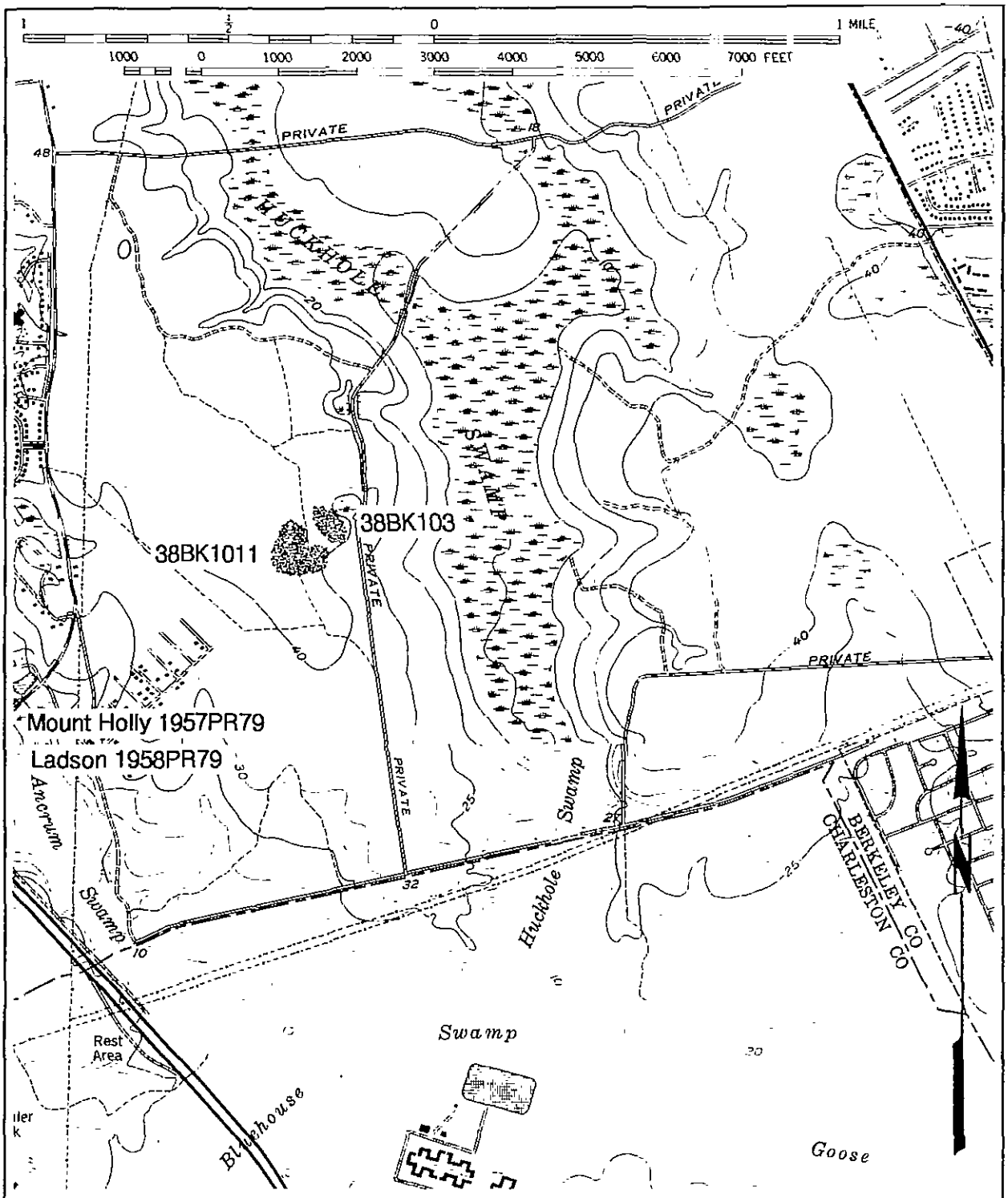



Figure 1. Portions of the Mount Holly 1957PR79 and Ladson 1958PR79 USGS topographic maps showing the area of 38BK103 and 38BK1011.

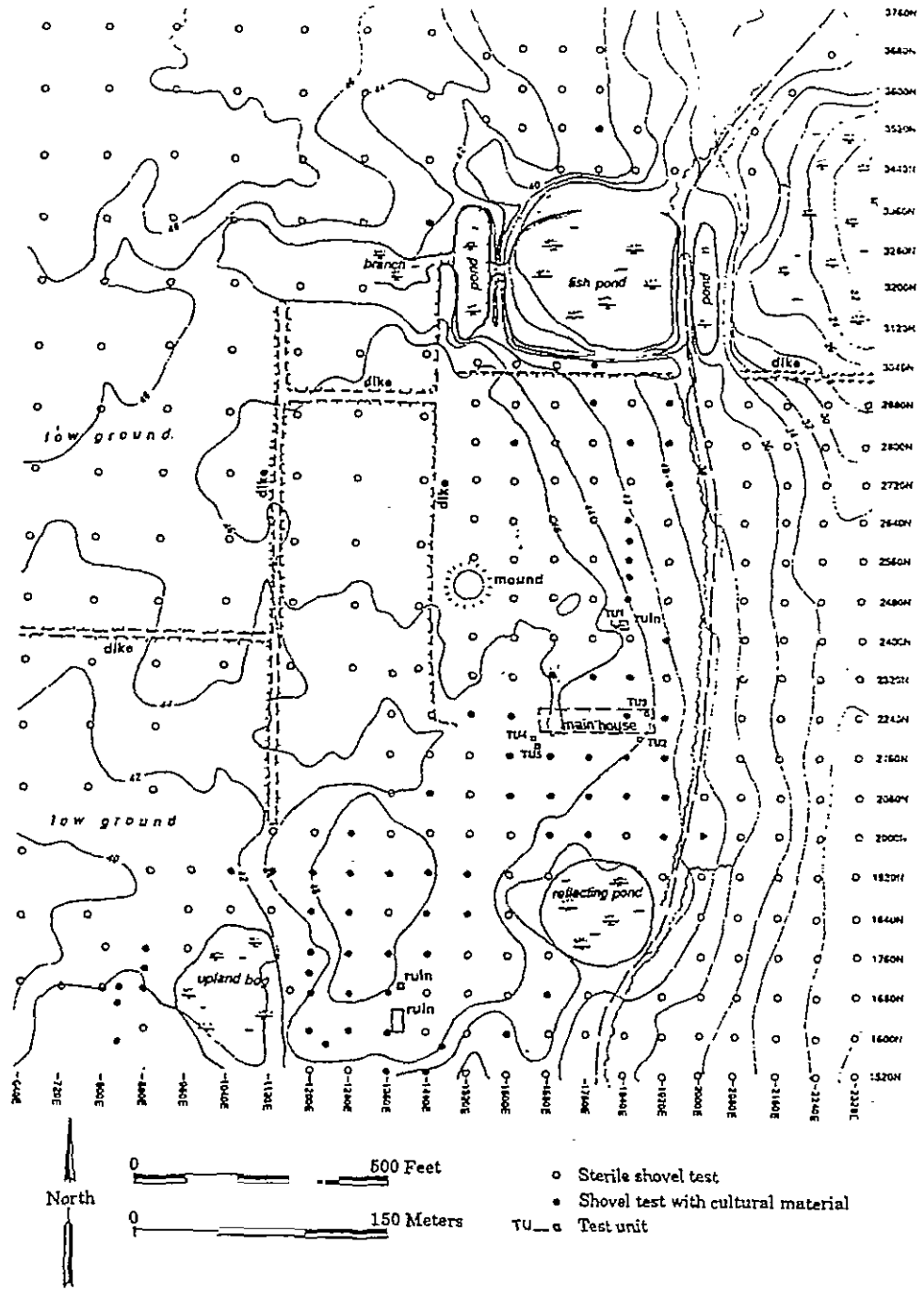



Figure 2. Site 38BK103 as reported by Elliott in 1987 (adapted from Elliott 1987:Figure 21).

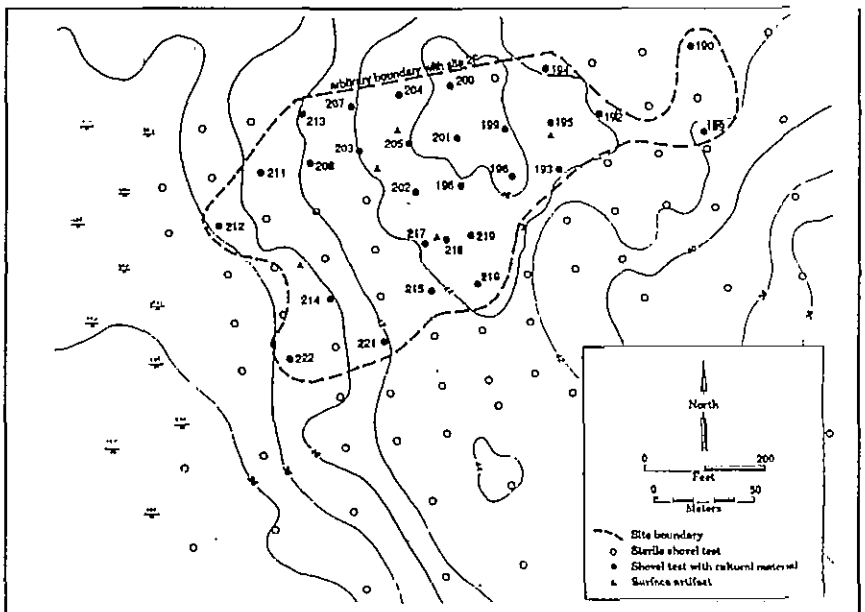



Figure 3. Site 38BK1011 as reported by Elliott in 1987 (adapted from Elliott 1987:Figure 29).

naval stores industrial sites (Site[s] 18 and 35), nineteenth-century settlements (Sites 10 and 34), late nineteenth- and early twentieth-century tenant farm sites (Sites 7, 9, 17, and 25), and other disturbed sites (Site 4). All were part of, or derived from, a single plantation system (Elliott 1987:49, 69).

A Memorandum of Agreement (MOA), dated March 29, 1988, was developed between the Department of Housing and Urban Development (HUD), the S.C.

Elliott's Site 32, situated southeast of 38BK103. Here the survey found two distinct areas. One consisted of the remains of a large inland rice reservoir. The other consisted of a dense scatter of eighteenth century ceramics, again dominated by Colono wares, accompanied by a scatter of brick. Also present on the site was a ditched spring (Figure 4). This site was thought to represent a second slave settlement area (Elliott 1987:89).

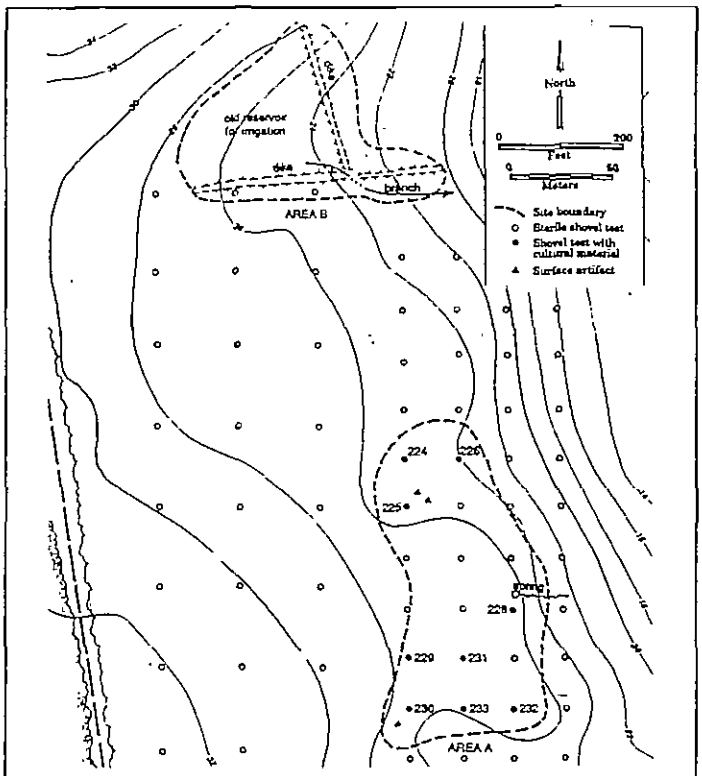



Figure 4. Site 32 as reported by Elliott in 1987 (adapted from Elliott 1987:Figure 33).

## Preparation of an MOA

Elliott suggested that the Crowfield settlement was very large and exceedingly complex, describing it as:

> the main house complex (38Bk103), eighteenth-century slave quarters (Site 31 [38BK1011] and Site 32), a complex eighteenth-century irrigation system (exemplifying distinctive features on Site[s] 26, 28, and 32), early eighteenth- century

State Historic Preservation Officer (S.C. SHPO), and the Advisory Council on Historic Preservation (ACHP), with the concurrence of the U.S. Army Corps of Engineers (COE) and Westvaco Development Corporation (the owner of the property). As a result of this MOA both the main house area (38BK103) and the associated slave settlement (38BK1011) were specified for either preservation in place or data recovery. The MOA, however, offered relatively little additional guidance and it did not include the other portions of the Crowfield settlement, especially the one identified as Site 32.

### Additional Testing of a Portion of the Crowfield Site and Slave Settlement

In 1990 Westvaco requested that Law Environmental conduct test excavations at sites 38BK103 and 38BK1011. The goals of this work were apparently to once again evaluate the eligibility of the two properties, determine more precise boundaries, and examine preservation and data recovery options. A draft report of the work was provided to Westvaco in early 1991 (Webb and Gantt 1991). This draft report has formed the basis of our recommendations and technical proposal for data recovery excavations.

The initial phase of the Law Environmental study was additional archival research for the Crowfield Plantation. Webb and Gantt remark that:

> One unfortunate aspect of the archival research was that the Principal Investigator was not able to add an appreciable amount of information to Elliott's (1987) literature review. This is both a tribute to Elliott's thoroughness and the limited reference to Crowfield in the archival collections (Webb and Gantt 1991:50).

The scarce historical information concerning Crowfield has also been noted in our examination of adjacent Broom Hall Plantation (Trinkley et al. 1995). Regardless, the draft report does provide a detailed, and very adequate, overview of the plantation and, especially, a land-use history appropriate to archaeological research.

At the two sites, which are essentially contiguous, 1,038 shovel test points were laid in at 20 foot intervals. Of these 757 could actually be excavated (the remainder were inaccessible, either because of construction activities or Hugo treefall). Of the 757 which were excavated, 567 were identified as positive (this, however, included tests with brick or mortar, as well as tests with diagnostic materials).

Five different loci were suggested for the southern end of the main plantation complex (38BK103), but the figure illustrating these areas was not included in the available copy of the draft report. Nevertheless, they are generally reconstructed in Figure 5 based on verbal descriptions and the location of subsequent test units. Webb and Gantt describe the areas as:

> Locus No. 11, which is along the northern edge of a large brick structural foundation (Structure No. 1) and about 45 ft southeast of a small brick foundation (Structure No. 2). Locus No. 12 is about 45 ft northwest of Structure No. 2. Locus No. 13 could not be specifically linked to a brick foundation, but the exceptionally high brick/mortar yield suggests that this locus is within or proximate to structural remains. Locus No. 14 could be related to Locus Nos. 12 and/or 13. . . . At present, Locus No. 10 can not be readily explained except that it probably represents a structure (Webb and Gantt 1991:92).

They also note that the 38BK103 areas:

> contain brick/mortar artifacts almost exclusively. The overall lack of household-related artifacts indicates that some of the structures along the southern

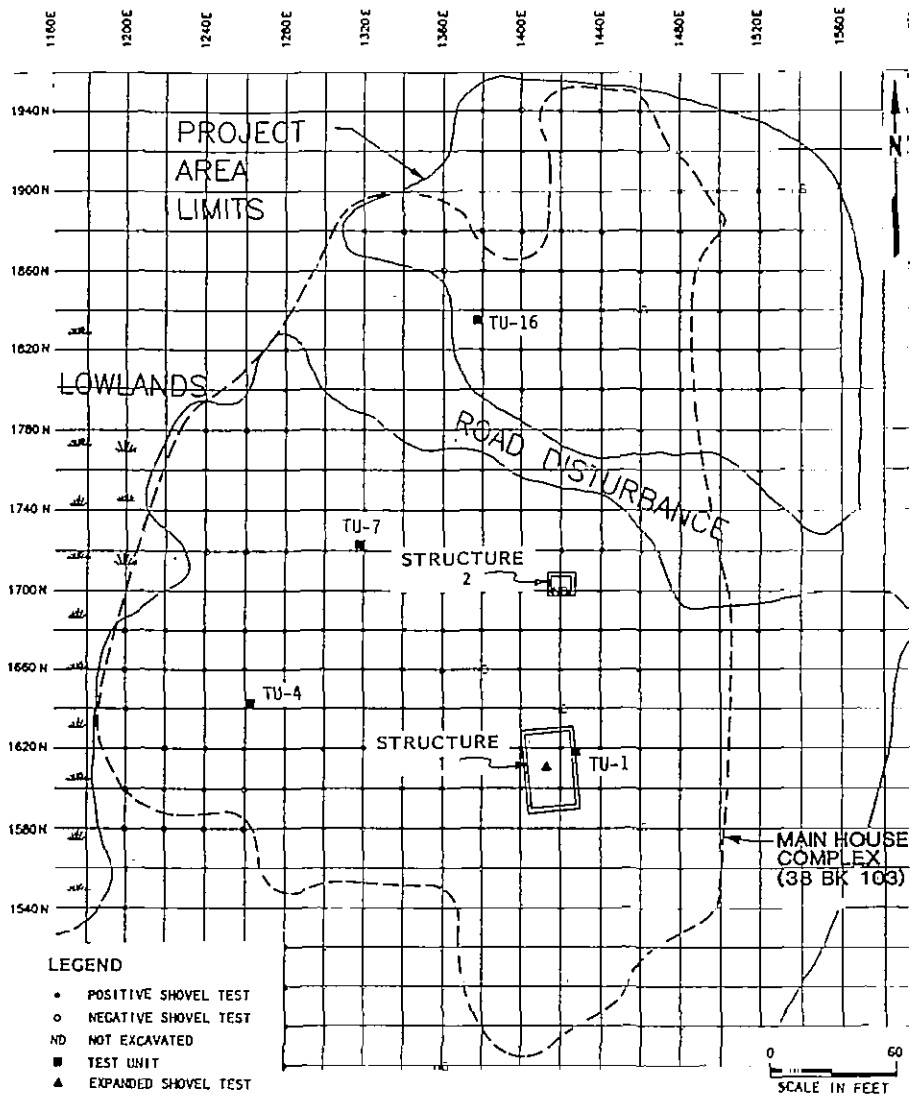



Figure 5. Site areas at 38BK103 defined by Webb and Gantt (adapted from Webb and Gantt 1991:Figure 5.10)

> edge of Site 38BK103 may have been used for storage rather than habitation (Webb and Gantt 1991:93).

This, of course is a very reasonable interpretation of the near absence of domestic remains and is consistent with what we know about planation landscapes. These findings will be more critically evaluated in a following section.

Based on their tests, Law Environmental identified nine different loci at the slave settlement (38BK1011). It is suggested that their Areas 3, 4, 5, and 6 represent the core of the slave settlement. Areas 1 and 7 are thought to perhaps represent discard areas near structures, while Areas 2 and 8 perhaps represent peripheral structures. These different areas are graphically illustrated in the Law Environmental draft report (Webb and Gantt 1991:Figure 5.7, reproduced here as Figure 6). Like those at 38BK103, we will return to these findings in a following section.

At the conclusion of the shovel tests, Law Environmental then proceeded to excavate a series of 16 five-foot test units — 12 at 38BK1011 and four at 38BK103. These served to supplement the artifact assemblages and offer additional information for the site interpretation. Their findings will be briefly discussed in the following section.

At the conclusion of the draft report, the various areas were largely combined to create "sensitive areas" which were recommended for additional investigation (Webb and Gantt 1991:Figure 7.1). The five areas at 38BK103 were combined to form three "sensitive areas" and the nine areas at 38BK1011 were combined to form one "sensitive area." This resulted in relatively little additional boundary definition.

Evaluation of this Additional Testing Data

Using the tabulations of artifacts provided by Law Environmental (Webb and Gantt 1991:Table 5.1) two computer generated density plots were quickly developed. One (Figure 7) illustrates artifacts (with each contour representing two specimens), while the other (Figure 8) illustrates brick density (with each contour representing 50 fragments of brick). The two artifact contour interval was chosen to maximize the definition of different areas, while keeping the map readable. The 50 fragment interval for brick was chosen based on our field experience with brick rubble and its potential for dispersion through either brick salvage or by agricultural or silvacultural operations. In order to designate structural remains, relatively dense brick rubble is essential.

At 38BK103 there is a dearth of domestic material. Only three "concentrations" (if they can really be called that) are found and each incorporates only a single shovel test. There is also only one concentration of brick rubble, although it does include multiple shovel tests. At one level these data serve to confirm the remarks offered by Webb and Gantt, identifying this portion of 38BK103 as serving primarily for storage. Yet, there seems to be little evidence in the general survey data for the multiple loci they identify. It is therefore appropriate to also examine the four test units excavated in this portion of the site.

Unit 1 was placed on the outside of a brick foundation (measuring 44 by 25 feet) identified as Structure 1. A builder's trench was identified and excavated. Artifacts were very scarce and the structure was tentatively interpreted to represent a rice barn (Webb and Gantt 1991:99-111).

Unit 4 was laid in at an area of reported high brick density (11 pieces). Again, very few domestic artifacts were found and only 36 ounces of brick were recovered in the unit excavations. The authors identify what they believe to be two somewhat parallel features and speculate that they represent "structural trenches." A small "window" was excavated into one, while the other was not further examined (Webb and Gantt 1991:115-122). It is not possible to determine what these represent, but there seems to be very little evidence to support the structural interpretation. For example, there seems to be no evidence of daub or post holes (such as would be found with a wall-trench structure) in the one supposed trench

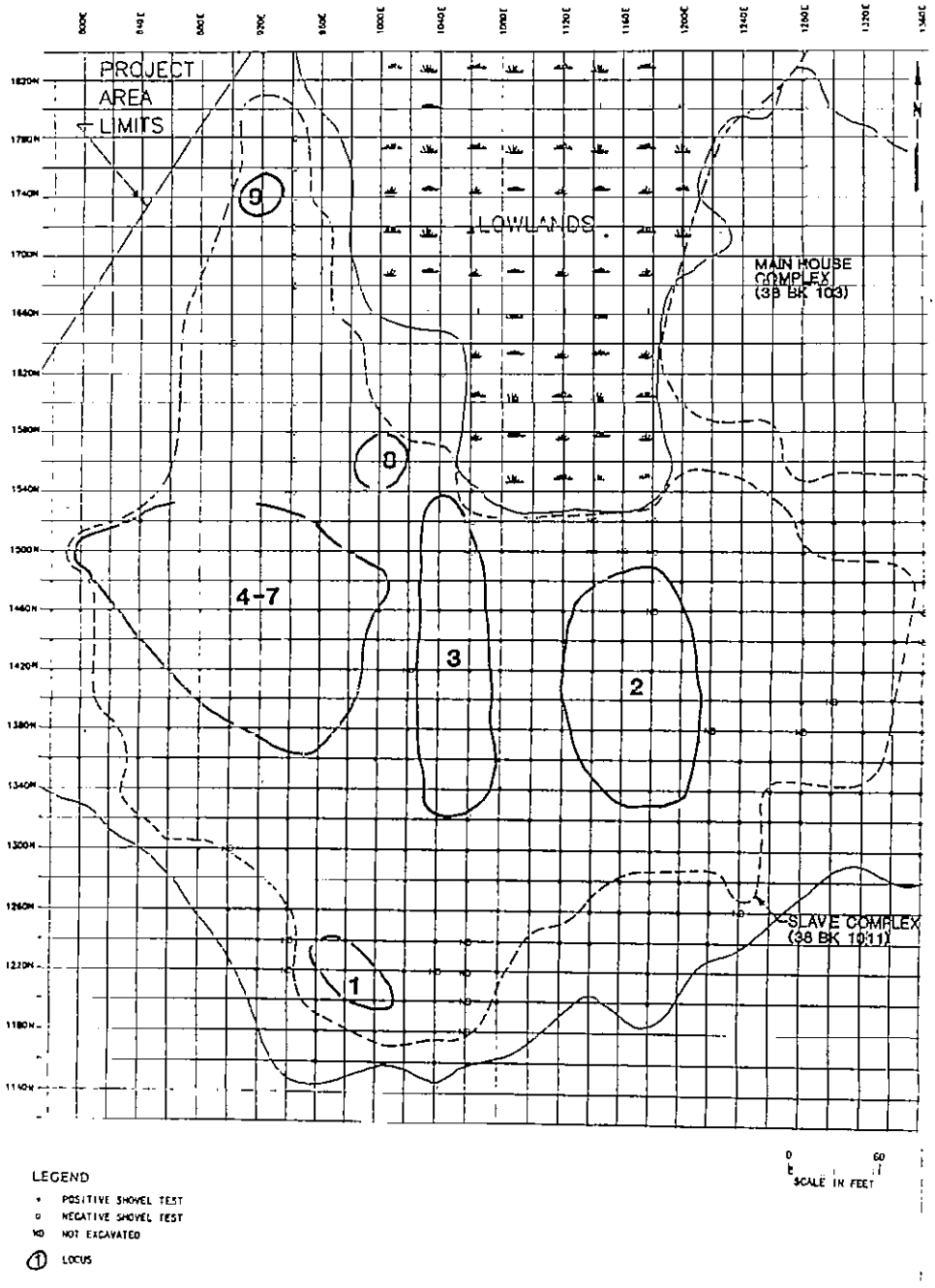



Figure 6. Site areas at 38BK1011 defined by Webb and Gantt (adapted from Webb and Gantt 1991:Figure 5.7)

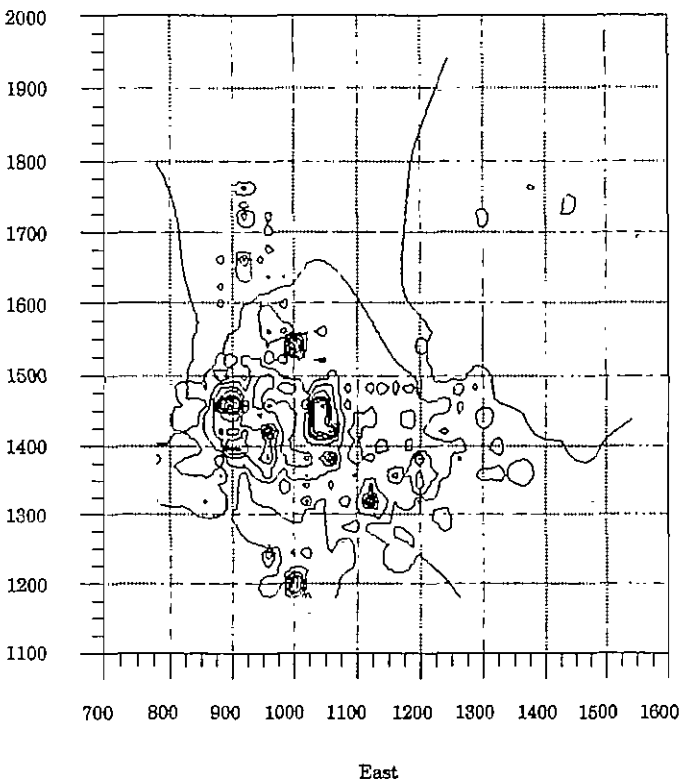



Figure 7. Computer density maps of shovel test artifacts (contour lines at intervals of two artifacts).

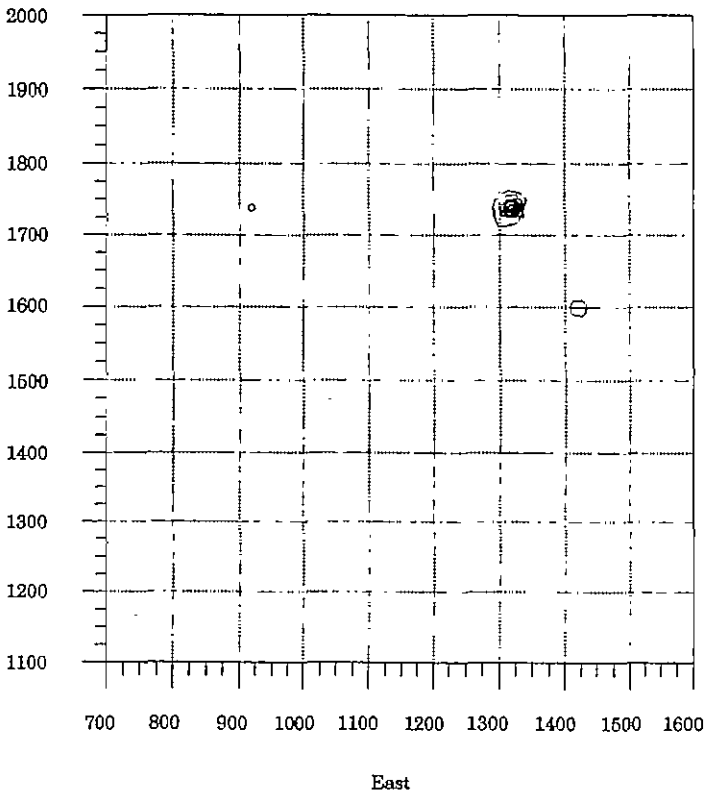



Figure 8. Computer density map of shovel test brick and mortar (contour lines at intervals of 50 pieces).

which was examined. Alternative interpretations range from plow or silvacultural scars to agricultural ditches.

Unit 7 was also laid in at an area of reported high brick density (29 pieces). After excavating a few inches, they came down on what was described as "brick and mortar aggregate" which had been "dispersed by silvacultural activities." The excavation into this zone continued for an additional few inches and was terminated prior to reaching subsoil (it is difficult to reconcile the verbal description which notes that excavation proceeded to a depth of 10 inches and the profile drawing which indicates that the excavation was terminated at about 6 inches). In the process of this excavation two features were reported penetrating the brick and mortar rubble (and hence post-dating this rubble lens and, presumably, its dispersion by forestry activities) (Webb and Gantt 1992:122-126). The dense brick rubble noted in this excavation is also that revealed by the computer density plot (Figure 8).

The last unit, Unit 16, was also laid in at a location of posited dense remains (presumably the 17 pieces found in the shovel test at 1820N/1400E). In spite of dense roots, a structural trench was claimed to be found, forming an intersection in the southeast corner of the five-foot unit. Only a small "window" was again excavated in the feature, and no evidence of daub or posts was reported (Webb and Gantt 1991:126-133).

In addition to these tests, Webb and Gantt speculate on the nature of Structure 2, a second intact brick foundation. Measuring about 11 by 10 feet, this particular structure appears to have been heavily impacted by site looters. Webb and Gantt report piles of backfill, as well as brick and mortar rubble. Their study was limited to sampling the looted spoil piles. This structure produced a small quantity of European ceramics and a comparatively large collection of Colono wares (109 specimens). In fact, this is the most domestic assemblage recovered from the portion of 38BK103 being investigated. Curiously, Webb and Gantt ignore the possibility of this representing a domestic structure. After suggesting that it might be a privy, well, or kitchen, they finally speculate instead, based on the presence of "charred bones," that it represents a "smokehouse" (Webb and Gantt 1991:115).

At the slave settlement nine units were excavated in eight of the nine areas and four additional units were excavated in non-defined areas (described as exploratory).

Units 6 and 10 were excavated in Area 1. Unit 6 was placed to explore the deposits at the "southern edge" of the area and Unit 10 was located to examine an area of dense Colono ware remains (18 sherds recovered from the associated shovel test). Unit 6 produced a trench, interpreted to be structural (although no clear structural evidence, such as daub or posts, was identified). The "window" excavated into the feature produced a very amorphous "cluster" of Colono ware sherds various interpreted by Webb and Gantt as a "post hole" and as simply a "cluster" (Webb and Gantt 1991:134-146). Unit 10 produced no convincing features, although two post holes were reported (Webb an Gantt 1991:146-154). Nevertheless, artifacts were relatively dense, supporting a near structural location.

Units 2, 5, and 9 were excavated in Area 2. Unit 2 was placed on the east edge of the area, Unit 5 was placed on the southeast edge in an area of dense kitchen remains, and Unit 9 was excavated at the northeastern edge, also in an area described as "moderately dense." While Unit 2 did produce relatively dense remains, no features were encountered (Webb and Gantt 1991:154-160). Likewise, Unit 5 produced no features, but yielded a large quantity of low-status material, including abundant Colono wares (Webb and Gantt 1991:160-168). Unit 9 was also relatively "clean," although an "enigmatic" feature, perhaps a "natural soil anomaly," was identified (Webb and Gantt 1991:160-174).

Unit 8 was excavated in the northern portion of Area 3 to explore a high density of kitchen artifact remains. Like those in Area 2, no features were encountered, but a relatively dense artifactual assemblage was identified. Webb and Gantt (1991:182) frequently associate the sparse architectural remains (such as found in Unit 8) with a midden area. We suggest a more cautious

interpretation. Wall and trench structures typical of early eighteenth slave settlements lack glassed windows, frame construction, and architectural hardware. Consequently, they frequently produce almost no architectural remains. Based on the shovel testing and excavation it is very difficult to distinguish midden from structural areas.

Units 3 and 11 were excavated in combined Areas 4, 5, 6, and 7. Both units were placed in dense areas of kitchen remains. Unit 3 produced two features, only briefly examined using the "window" approach. Comparing the drawing illustrated by Webb and Gantt (1991:Figure 5.27) with their photograph of the unit (Webb and Gantt 1991:Plate 5.36) reveals considerable similarity, although the feature in many ways seems much more distinct than is suggested by the drawing. Regardless, Webb and Gantt remark that, "the relative position of Feature 1 to Feature 2 indicates that Feature 1 is probably the interior wall of a double bay structure" (Webb and Gantt 1991:186). Later they remark that:

> Test Unit 3 was placed on the remnants of a slave cabin at the juncture between the exterior wall and what appears to be an interior wall that divided the structure into two bays. Two exterior wall trenches with supporting posts were identified. The fact that the interior wall does not appear to have been rebuilt, suggests that house form may have changed over the structure's occupational span (Webb and Gantt 1991:192).

We were less convinced than they that the very limited "window" actually provided good evidence of rebuilding. Regardless, even if this were revealed to be the case, the interior wall may never have been rebuilt since it would not have been load bearing. As only a partition wall, its structural integrity would have been of minor concern. Moving on, Unit 11 produced what Webb and Gantt describe as "two feature-like areas," one of which was thought to be a very shallow post hole and the other to be "soil anomalies" (Webb and Gantt 1991:192-198).

Unit 15 was excavated in Area 9 to explore an area found during shovel testing to exhibit dense brick remains (30 pieces). This unit revealed what was interpreted to be a wall trench along its eastern and northern edges. Webb and Gantt remark that the unit "was placed just inside the wall of a dwelling" (Webb and Gantt 1991:207). The photograph provided, however, reveals that the trench originates very high up in the profile, almost at ground level (Webb and Gantt 1991:Plate 5.43). Since there has been some degree of cultivation and silvacultural activity, this might suggest that the feature is relatively recent. The fact that the feature contains an assemblage almost identical to the unit fill would only be expected if it was a modern intrusion backfilled with the original soils.

Three units — 12, 13, and 14 — were used to explore different areas of the site. Unit 12 was placed at the southern boundary of the settlement, based on the shovel test data. Given its location it should come as no surprise that it yielded few artifacts and no features (Webb and Gantt 1991:207-209). Unit 13 was placed between Areas 3 and 4-7 "to examine the nature of inter-locus cultural deposits" (Webb and Gantt 1991:209). Again, it should come as no surprise that few artifacts and no features were encountered. Webb and Gantt observe that, "the sparsity of artifacts and lack of structural features in Test Unit 13 supports the contention that the area sampled by this unit was between occupational clusters" (Webb and Gantt 1991:213). Finally, Unit 14 was placed in the northwestern edge of the settlement, "in an area producing less than 10 artifacts per shovel test" (Webb and Gantt 1991:213). Here the artifact density was greater, although it averages out to only 9.2 specimens per square foot — essentially identical to that found in the shovel tests. A possible pit or post hole feature was found along the south wall of the unit. Basin-shaped upon excavation, it produced no artifacts.

### Testing at the Main Plantation and Gardens

While Webb and Gantt were busy with the

testing at the slave settlement and outlying portions of 38BK103, Westvaco requested that Chicora Foundation and Hugh Dargan and Associates conducted investigations of the main house and garden area in order to assist in the long-range preservation of that portion of the site. George Fore and Associates (1990) had previously examined the ruins of the main house and made recommendations concerning its architectural stabilization. In 1992 Chicora conducted limited archaeological testing of the garden designed to "feed into" the landscape preservation plan.

These investigations revealed the carefully arranged buildings forming the main settlement, including the mansion, two flankers connected to the mansion by a screening wall, and a privy. Laid out in a very common Palladian style, the mansion and flankers begin to establish the symmetrical landscape. The screening wall was perhaps intended to serve as a boundary for the garden, or perhaps was intended to connect the various structures, forming one immense facade as visitors rode down the mile-long avenue to the house. Such an interpretation would suggest an effort to add mass and scale to the relatively small Crowfield mansion, considerably improving its appearance.

The avenue, unfortunately, no longer exists, having been incorporated into the Crowfield development and golf course. The gardens, however, were not isolated from the house, but rather encompassed the house, making the dwelling a part of the total experience.

The first evidence of the gardens was likely the "moon" pond found south of the main house and still preserved. Carefully designed to serve as a reflecting, it served to set the stage, forecasting the remainder of the garden. There is also some evidence that this pond may have served as a repository for plantation trash, although this can no longer be confirmed since it was dredged as part of the development program.

Entering the garden from the house there was the parterre, artificially raised about a foot from the surrounding elevation and encompassed by earthen berms on the eastern, western, and northern sides. To the south the brick screening wall served to isolate the garden from outside world. This main portion of the interior terrace garden was filled with up to a foot of spoil coming from the excavation of the ponds and canals during the initial garden construction. More fill was used to create the berms. The central garden area and the associated earthworks were found to have received only a shallow dressing of top soil, sufficient to support grass. The one exception to this was along the interior edge of the berm where there was a linear planting bed several feet deep (designated Feature 1), perhaps constructed to allow larger shrubs adequate root penetration.

At the northern corners of the interior terrace were two small brick structures. The one remaining in good condition measures about 10 feet square and was originally plastered and finished with a blue pigment.

The excavation of the privy at the western edge of the site revealed little. The structure measured about 6 feet square (OD), with an interior space about 4.5 feet square. Artifacts were common, but fragmented, in the one foot of soil found within the structure (designated Feature 2). The excavation came down on a mottled yellow sandy subsoil about 1.2 feet below ground surface. Although still tentatively identified as a privy, the depth and construction of the structure is not replicated by other plantation privies (see, for example, Haskell 1981).

**Synthesis Based on Survey and Testing Data**

Both sites 38BK103 and 38BK1011 were determined to be eligible for inclusion on the National Register prior to the Law Environmental study. That is, of course, why they were included in the MOA. Nevertheless, the study by Webb and Gantt reveals even more clearly the diversity, integrity, and research potential of the two sites.

While the work also determines very accurate site boundaries, of greater significance is the development of a solid research base guiding future investigations. Although we are not in total agreement with the interpretations offered by Webb and Gantt, they do provide exceptional

testing level information.

The use of shovel testing at 20 foot intervals is, as previously mentioned, minimally appropriate. We have used this approach ourselves at Broom Hall, Crowfield, Lower House, and recently at Crawl. It provides what might best be described as a "gross" overview of the site. To obtain better information you must drop down to testing at 10 foot intervals. This so greatly increases the time involved it has been used in relatively few situations (we, for example, have compared data using both techniques, but have never adopted a 10-foot interval). Likewise, the use of 5-foot tests is appropriate, although one might argue over the number of tests or their placement.

Webb and Gantt attempted to do a great deal with really very limited data. Many of their "conclusions" would be better characterized as "speculations." Testing of this nature is typically very good at establishing boundaries, characterizing sites in a general fashion, and assisting in eligibility determinations. Testing of this nature is typically not very good at addressing significant research questions. There is simply too much left unexplored. This is an important caution, since Westvaco has repeatedly asked if additional work can actually tell us more than this very limited testing. This is a very reasonable question when the results of limited testing are presented as conclusive. We believe, however, that what we know about these two sites is considerably less than has been interpreted. Webb and Gantt offer a range of very limited data and make the best of it by offering very tentative speculations. While we understand the motivation, it often makes more sense to suggest a range of different scenarios which might explain the data.

We draw somewhat different conclusions from the data than do Webb and Gantt. The two most striking differences have to do with the slave settlement, 38BK1011. We are not convinced that (1) the site is an intact as might be thought and (2) that the identified features are all what they appear to be. Our skepticism is based on the report descriptions and our experience at Broom Hall and Crowfield (Trinkley et al. 1992; Trinkley et al. 1995).

We are struck with how similar the condition of the Crowfield slave settlement is what we found at Broom Hall. There we found about a foot (in some cases more) of very homogenized soil overlying subsoil. Features were badly disturbed and the artifacts, while very numerous, were largely plow zone size. Webb and Gantt understandably focus their interpretations of the features and individual post holes on structural remains. Yet, we know that slave settlements can evidence lots of different "things" going on. These can include drainage ditches, cultivation trenches, and activity areas in yards.

In spite of this difference in professional interpretation, there was ample data on which to develop a detailed mitigation plan. Further, we believed that although there is some legitimate difference of opinion regarding the nature of 38BK1011, sufficient evidence has been presented to suggest that at least some structural remains are present.

The testing data also provides a very thorough overview of occupation range. The ceramics suggest mean date from as early as 1732 to as late as 1791, while the tobacco pipe stem bore diameters yield dates suggest means of 1738 and 1743 (Webb and Gantt 1991:228). The cumulative date range is about 1730 to 1800, consistent with the historical research. This range is also consistent with the findings at Broom Hall (Trinkley et al. 1995) and offers the potential to explore a period for which there is very little complementary information available in South Carolina.

**Preparation of a Data Recovery Plan**

At the request of Westvaco Development Corporation, Chicora Foundation prepared a data recovery plan for the portions of 38BK103 to be affected by proposed development along with the entirety of 38BK1011. This plan, dated September 24, 1995, was reviewed by the S.C. State Historic Preservation Office (SHPO), the U.S. Housing and Urban Development (HUD), the Army Corps of Engineers, and the Advisory Council on Historic Preservation (ACHP). While the plan was being reviewed by the MOA parties, Westvaco

Development Corporation entered into an agreement with Chicora Foundation on October 6, 1995 to conduct the necessary work.

The SHPO approved the plan in early October, offering only technical comments (letter from Mr. Lee Tippett to Dr. Michael Trinkley, dated October 2, 1995), which were subsequently addressed (letter from Dr. Michael Trinkley to Mr. Lee Tippett, dated October 4, 1995). The ACHP likewise offered only technical observations (letter from Mr. Don Klima to Dr. Michael Trinkley, dated November 13, 1995), which were addressed in a responding letter (letter from Dr. Michael Trinkley to Mr. Don Klima, dated November 20, 1995). Further information concerning the project was provided to Ms. Laura Henley Dean with the ACHP on December 1, 1995 (telecopy from Dr. Michael Trinkley to Ms. Laura Henley Dean, dated December 1, 1995).

The Corps of Engineers approved the plan without comment on October 17, 1995 (email from Mr. Dean Herndon to Dr. Michael Trinkley, dated October 17, 1995). HUD likewise approved the plan without comment on October 30, 1995 (letter from Mr. David Bell to Dr. Michael Trinkley, dated October 30, 1995).

**Research Goals**

Webb and Gantt (1991) discuss a range of research questions which were deemed worthy of additional consideration during data recovery excavations. These research topics include:

1. What is the functional time span of both 38BK103 and 38BK1011? Although we have been provided with a general range for the slave settlement, there is some indication that the main settlement continued to be active up to perhaps 1845. Yet the slave settlement seems to reveal little activity after about 1800. While excavation at these limited sites will not confirm that the slave settlement changed location, additional research can confirm that this initial assessment of dating is correct. The movement of the slave settlement may be associated with the changing function of the plantation, obsolescence of the settlement area, or perhaps other factors not yet identified. Consequently, one research goal was to determine the occupation date range for the two settlements and compare this data with that obtained from excavations around the main house (Trinkley et al. 1992), as well as with the historical documentation.

2. What is the intra-site patterning of the slave settlement? Absent plats or verbal accounts, only archaeological investigation can help us understand what this settlement looked like and how it was organized. Webb and Gantt have offered a tentative reconstruction of the orientation, but this is based on no structural excavations. Will the findings at 38BK1011 compare with those from the Crawl Plantation slave settlement (which dates from the same time period) and the Yaughan/Curriboo slave settlement (which dates slightly later)? If so, we anticipate finding evidence of extensive yard activities, including open-air hearths and trash disposal in pits. Structures, during this very early period, tentatively appear to have been used only for limited activities, primarily in poor weather. Otherwise, many activities took place in the yards. How is the southern end of the main settlement organized? We know from other excavations and few well drawn plats that plantations were not nearly as

simple as we might imagine. A wide variety of both functional structures and "follies" were likely present on large plantations like Crowfield. We also know that slave hierarchy is not nearly as simplistic as the field—house slave dichotomy might suggest. It may be that Structure 2 at 38BK103 represents a domestic structure for specialized slaves. Such structures have been found at Cotton Hope and Seabrook plantations.

3. What is the variability of early colonial and late eighteenth century slave diets? Increasingly our examinations of plantation subsistence remains is revealing considerably more complexity than Elizabeth Reitz's early plantation work would suggests. For example, we have found that the diet of slaves will vary by the wealth and status of the owner, that it will vary by their status within the plantation, and that it will vary through time. The slave settlement at 38BK1011 offers a unique opportunity to examine the diet of a very early settlement. This exploration, of course, should focus on a wide range of remains and it should (if possible) include a range of techniques to explore faunal remains, carbonized plant remains, pollen, possible phytoliths, and even carbonized food residues.

4. Can evidence of social stratification among the slaves be found? This is a particularly valid line of inquiry should Structure 2 at 38BK103 be identified through more investigation as a specialized slave structure. It would then be possible to compare the remains present in the slave village (38BK1011) with the remains from this one structure. It may also be possible to identify some differences in the main settlement, although plowing and other post-depositional disturbances may make this impossible.

5. What did the structures at 38BK103 and 38BK1011 look like? There are very few sites which have produced structural remains pre-dating the American Revolution. It is essential that we begin to better understand the range of variation typical of early eighteenth slave settlements. Only by exploring a broad range of architectural remains from these villages will it be possible to understand the influence which Africa had, or did not have, on black culture. Recently we have been involved in the planning stages of a new display at the Octagon in Washington, D.C. focusing on the African-American builder. It is increasingly clear that we have far too few data to truly understand the African-American contribution to plantation architecture. This is a critical need identified by historians and archaeologists alike.

6. Webb and Gantt note that their work found "the Crowfield slave population was not endowed with significant quantities of European-made goods" (Webb and Gantt 1991:234). An identical observation was made concerning the Broom Hall slaves. The assemblage at both plantations is dominated by Colono wares. European goods of any description are so rare as to almost be unique. The diversity of

the remains is equally limited, with ceramics and tobacco pipe remains accounting for the vast bulk of the European material found in the slave assemblage. Webb and Gantt, somewhat naively, note that, "it appears that the Crowfield planter/overseer classes severely deprived the slave population through neglect, absence, poor management and/or ignorance" (Webb and Gantt 1991:214). Perhaps more appropriately, the Crowfield assemblage provides a view of the operation of power and alienation in the early Colonial period. This represents a period when black and whites were still "working" to establish their respective roles in plantation society. The presence of intact features at Crowfield may assist in further, and more successfully, exploring this interaction than was possible at Broom Hall, which exhibited rather severe plowing and post-depositional damage.

7. The Crowfield slave settlement also offers the potential to examine Colono ware ceramics in much greater detail than was possible at Broom Hall. It is especially significant that the two sites are both spatially and temporally related. This will significantly help to control possible variables in the analyses. Typological examination will help refine our previous observations at Broom Hall that Colono and River Burnished wares could not consistently be identified and that they must be seen as varieties of the same type, not as two distinct types. Crowfield will also help to further evaluate the range of potential variation due to idiosyncratic factors, primarily different potters. The assemblage will also offer an opportunity to expand on our previous mineralogical, petrographic, and chemical studies.

In order to effectuate the study of these topics, we realized that it was essential to focus on carefully controlled excavations which could produce data of very high quality. Some aspects of the proposed research would also require that as much, or more, attention is devoted to analysis than to data acquisition.

We conceived of this project focusing primarily on the known or anticipated architectural remains at 38BK103, the collection of comparative data from posited specialized domestic quarters at 38BK103, the examination of several posited structural areas at 38BK1011, and the examination of associated yard areas at 38BK1011, coupled with very detailed analyses which involve a broad range of expertise.

**Curation**

The field notes, photographic materials, and artifacts resulting from Chicora Foundation's investigations will be curated at the South Carolina Institute of Archaeology and Anthropology (SCIAA). This facility was chosen for curation of this collection since all of the earlier archaeological collections from Crowfield are houses there and it is appropriate that the materials remains at one facility.

The specimens have been cleaned and are in the process of receiving conservation treatments, consisting primarily of electroylic reduction of iron and copper specimens. These materials will be transferred to the curatorial facility as soon as treatments are complete.

The remaining collections have been cataloged using the system employed by the SCIAA and will be transferred to that facility at the conclusion of this project. All original records and copies will be provided to the facility on pH neutral, alkaline buffered paper. Black and white photographic materials have been processed to

archival permanence. Color slides, while not considered archivally stable, consist primarily of Kodachrome material, which exhibits the least color fading of any transparency film in dark storage conditions.

# FIELD STUDY AND RESULTS

## Strategy and Methodology

### Historic Research

Although no additional historical research was initially proposed, during the course of this work the Early South Carolina Newspapers (ESCN) Database published indices for the *South Carolina Gazette* covering the years 1732 through 1751. This covers the period of William Middleton's ownership, stopping just prior to the sale of Crowfield to William Water in 1754. A search of the *ESCN Database Reports* revealed the first mention in 1734, about five years after his father gave Crowfield to his son. The number of references to William Middleton gradually increases, suggesting that as Middleton became more established at Crowfield his public profile increased.

In addition, additional historic research was conducted to better document the land use of the plantation during the twentieth century. Special attention was paid to period maps and aerial photographs.

### Field Studies

Webb and Gantt (1991) recommended broad stripping for the recovery of features as their preferred data recovery technique. Consequently, some modest discussion of this technique is in order.

Certainly there are times and places for stripping. An appropriate time is when the archaeologist is confronted with the necessity of conducting salvage archaeology and there is no other option. Curiously, some in the discipline has expanded this to include sites where hand excavation would be too costly. While Chicora, as a public non-profit foundation, strongly advocates accountability and cost-effectiveness we also believe that there are times when less data, carefully gathered, are better than more data gathered under hurried conditions which are considerably less than ideal.

Likewise, the place for stripping is on large agricultural fields where the sandy loam soil can be easily removed, allowing relatively clean expanses for the recordation of features. A place where stripping does not work is wooded tracts. This is especially the case where the subsoil is clayey or dries out quickly, requiring especially quick cleaning and recordation of features before soil colors are lost.

We believe that it is also important to emphasize that stripping may also be inappropriate when features contain relatively few artifacts suitable for dating and functional interpretation — which seems to be the case at Crowfield according to Webb and Gantt's report. If the artifacts which can provide information about the function of a structure or site area, can provide dating, and can provide information on other research questions are in the upper foot, there is relatively little left once the site is stripped. It may be possible to identify and record seven or eight times the number of features (such as houses), and this may help explore the settlement pattern, but it will likely be impossible to date the various structures, or distinguish social status between occupants, or perhaps even determine function, since most of the artifacts, being found in the upper foot of the soil, have been stripped off the site.

So, stripping is often less expensive than controlled excavations, but we question its use at a general level. By this we mean that stripping may not be the only acceptable methodology at this particular site.

It is also very difficult to strip a wooded tract — finding equipment small enough to work around trees but big enough to do the job, constantly having to move the stripped soil off the

site, locating a suitable place for stockpiling the soil, afterwards restoring the site so it can be shown to prospective buyers, and finally assuming the liability for trees left standing but which may die two to three years later because of the induced stress. At Crowfield all of these would be major issues.

To these problems, it would also be appropriate to add the concern that an expert operator be consistently available, that the soil can be quickly cleaned up and the features plotted before the soil dries out, that the area can be protected from site looters, and that the site can be kept from flooding during rain.

It seems that the only possible way to strip these sites, and deal with the majority of these concerns, would be to strip a small portion — only what could be dealt with that day. The cost of this approach quickly equals the cost of more traditional hand excavation as operators and equipment are kept on standby for long periods of time.

A more appropriate technique for data recovery at these two sites is through hand excavation — a technique which has also been advocated by Webb and Gantt (1991:256-258). Based on our review of the project report, the available mapping, and our computer density maps, we have offered some modification to their recommended scope (discussed in the following section).

## Excavation Methodology

Although we anticipated conducting this research in the winter, when the Crowfield vegetation is at its lowest point, we also realized from previous work at Broom Hall that vegetation was a serious concern. Consequently, Westvaco bush hogged both sites prior to our work. This was adequate to open the site to better understand spatial relationships, allow accurate mapping, and permit field vehicles access with equipment. We also had Westvaco remove a number of trees which would otherwise interfere with our proposed excavations. While there were still problems with some trees, these concerns were dramatically reduced by this selective thinning.

At both sites, Westvaco re-established the Garrow and Associates grid (which was also used by Webb and Gantt), establishing wooden stakes with survey tacks at no greater than 50 foot intervals. This was thought to be minimally adequate for maintaining horizontal control of site excavations. In general, we found this to be correct. What we also discovered were a series of errors in the grids and the previous excavations.

Relatively minor errors, in the range of 0.1 to 0.3 foot were found in the grid used during these excavations and the grid from previous work. It appears that these errors were introduced depending on the hub or station used by Westvaco to restore the grid. Based on discussions with the Westvaco survey crew, it is likely that the current grid is more accurate than the one they previously established for the Law Engineering study.

In addition, we found a number of errors in the layout of Webb and Gantt's units, often by distances of several feet. In other cases, units were reported to be at one grid location in the report, but were actually excavated at another location. Since the errors are not consistent (and some units were perfectly located), it is unlikely that these problems are related to the technique used by Westvaco to relocate the grid points. Instead, these problems appear related to either inaccuracies in measuring or to incorrect unit designations in the field.

At least three vertical control points were established by Westvaco (one at 38BK103 and two at 38BK1011) with mean sea level designations. These were expanded as necessary to cover all areas of the sites. This was an important modification of previous work at the site by both Elliott (1987) and Webb and Gantt (1991), both of whom used the existing ground level to designate depths. The existing ground level is subject to considerable change and even interpretation. Moreover, it cannot be accurately reproduced by later researchers and cannot be compared between units.

Excavations at the sites used the previously established grid coordinates, although for ease of our staff we express the coordinates as 1000R2000, rather than 1000N/2000E. In addition, units were consistently designated by their southeast corner grid point (Webb and Gantt designated units by various corners).

Excavations at the sites were conducted by hand, using mechanical sifters typically fitted with ¼-inch inserts for standardized recovery of artifacts. Excavation were excavated by natural soil zone with all materials except brick and mortar retained by provenience. Brick and mortar were weighed and discarded on-site (except for small samples retained for analysis and curation). A one-quart soil sample was retained from each zone. Some colleagues retain much smaller samples (often no larger than an ounce), in order to minimize the size of the collection for curation. Such small samples severely restricts the type of future analyses possible. This seems to be a false economy at sites were development will preclude the ability to return to the site and collect undisturbed soil samples.

Where appropriate the excavation proveniences also distinguished between structural interiors and exteriors. Munsell soil color notations were made during the course of excavations, typically on moist soils freshly exposed.

Units were trowelled and photographed using black and white negative and color transparency film at the base of the excavations. Each unit was drawn at a scale of 1 inch to 2 feet. Features were designated by consecutive numbers (beginning, at 38BK103, with Feature 3 since Features 1 and 2 were used at our previous excavations [Trinkley et al. 1992] and beginning with Feature 1 at 38BK1011. Post holes were consecutively numbered by specific unit. Features, depending on the evaluation of the field director, were either completely excavated, bisected (i.e., partially excavated), or not excavated (if thought to be redundant). Feature fill was screened through ¼-inch mesh and features, upon completion of their excavation, were also be photographed using black and white negative film and color transparencies. One quart soil samples were obtained from all features. Features with dark, organic fill also had flotation samples (minimally 5 gallons in volume) collected for subsequent water flotation. Features with relatively light sandy fill rarely produce adequate ethnobotanical samples and their flotation was not considered cost-effective based on our experience at nearby Broom Hall plantation (see Trinkley et al. 1995:253-258).

In addition to flotation samples, we also collected pollen and phytolith samples. These were collected from areas of moist soils (which we hoped would maximize pollen preservation) or from areas of special interest, especially with identifiable contexts. For example, collection of samples in the vicinity of Structure 8[1] at 38BK103 may help us eventually determine the function of this building.

Near the conclusion of the hand excavations at both 38BK103 and 38BK1011 a decision was made to strip some areas in search of specific information. At 38BK103 our interest was the recovery of additional wall features associated with Structures 7 and 9. At 38BK1011 our interest was to determine the existence of additional ephemeral structures, as well as to further expose structures identified in hand excavations. Stripping was conducted using equipment and operators provided by Westvaco. In both cases a small bulldozer was used. It was sufficiently small to be able to maneuver around trees, yet sufficiently large to be able to cut through roots without losing traction.

[1] A variety of designations have been used for the structures at 38BK103. The designations used in this study incorporate those previously identified at the main complex (see Trinkley et al. 1992). Structure 1 is the main Crowfield House, Structure 2 is the east flanker of the main house, Structure 3 is the west flanker, Structure 4 is the east garden structure, Structure 5 is the west garden building, and Structure 6 is the privy west of the main house. Structure 7 is the smaller (and earlier) of the two posited rice barns in the southern portion of 38BK103. Structure 8 is the utility building in this same area. Structure 9 is the larger (and most recent) of the two posited rice barns.

Stripped areas were shovel skimmed and identified features were then photographed and mapped. In several cases the stripped areas were roughly trowelled to help distinguish the features from the surrounding matrix. No effort was made to excavate these features since the work was conducted at the end of the project.

At the conclusion of the excavations the areas were covered in plastic and the profiles were backfield, but all units were left open for final backfilling by Westvaco.

Laboratory Processing and Analysis

Processing was begun in the field during periods of rain, but was completed at Chicora's labs in Columbia. During both field processing and lab processing all individuals were cautioned not to aggressively wash the Colono wares. Since we want to explore the possibility of residue analysis it is important that the residue is both intact and that it has been exposed to as few chemicals as possible. We believe that the analysis of organic residues is another means of pursuing subsistence data. Unfortunately, while there are a variety of foreign researchers engaged in this type of study, we have yet to find the necessary expertise in the Eastern United States. In addition, it appears that for the technique to be successful you must already have a very good idea of what is being searched for (that is, you must search for specific compounds, rather than conducting a "blind" search). We are currently exploring the possibility of using the phytolith research to guide further research in this area.

Brass artifacts were also not be washed, but were only be dry brushed in order to minimize the potential for exacerbating any potential bronze disease.

During the washing, artifacts were be sorted by broad categories — ceramics, Colono wares, metals, glass, and other materials. Upon drying artifacts were be temporarily bagged by these categories, pending analysis.

Analysis identifies ceramics, determines their vessel form where possible, and conducts match and mend for the calculation of minimum number of vessel calculations. Analysis is including application of South's mean ceramic dating technique, as well as Bartovic's dating range approach. It will likely not be possible to use Miller's ceramic indices since these are designed for late eighteenth and early nineteenth century collections. Regardless, it may be possible to incorporate some of Otto's analyses comparing vessel forms and decorative motifs. Similar processes are being used for the bottle and container glass.

The Colono ware ceramics are being separated for specialized analyses. We are working with Dr. Michael Smith (UNC-Wilmington) on selecting sherds for thin sectioning suitable for petrographic study, as well as sherds for chemical studies. He has worked with a similar collection from Broom Hall and is very familiar with the typology and, particularly, our interest in exploring the difference between Colono and River Burnished wares.

Architectural remains such as nails are being identified to type and intact specimens will be measured for the reconstruction of building technology. Analysis of tobacco pipes, as in the case of Webb and Gantt's study, may focus on not only dating the remains, but also on comparing the proportion of bowls and stem fragments for an indication of re-use. Analysis of personal items, furniture remains, and clothing remains will most likely focus on broad synthetic statements, although specific artifacts may provide significant status or dating clues. Finally, the collections will also be subjected to a detailed pattern analysis.

The results of these different analytical techniques can be compared to our previous investigations at the Crowfield main house (Trinkley et al. 1992), the original Crowfield survey (Elliott 1987), or the Broom Hall collection (Trinkley et al. 1995), as well as to a small collection of other nearby eighteenth century sites, especially work at Yaughan and Curriboo (Wheaton et al. 1983).

In addition to these studies, the zooarchaeological materials are being sorted out

for possible examination by Dr. Homes Hogue. At present, none of the assemblages are presenting collections suitable for detailed study. In fact, the only provenience where the bone makes even a noticeable contribution is in and around Structure 8 at 38BK103. Since there are questions regarding the function of this structure, we anticipate submitting these remains for analysis.

**Results at 38BK103**

We recommended approximately 2,700 square feet of excavation at the southern end of the main house complex. Coupled with this we also suggested that small areas might be stripped for exposure of features. A total of 656 person hours were devoted to work at 38BK103. A total of 785.5 cubic feet of primary excavation was conducted between January 25, 1996 and February 12, 1996.

The work actually conducted at 38BK103 was less than originally proposed, with only 1,000 square feet of controlled excavation and 200 square feet of stripping undertaken. We anticipated some fluctuation or difference between the projected square footage and the realized excavations, primarily because of unknowns such as soil conditions, artifact density, and site access. And, in fact, a week of rain prior to our work, combined with loamy soils, resulted in a reduction in screening speed. The dense brick remains encountered at Structures 7, 8, and 9, further reduced our productivity. Some reduction in coverage was also caused by problems we encountered relocating the previously investigated units and attempting to correlate often disparate findings. Most of the reduction, however, was the result of the Advisory Council of Historic Preservation's (ACHP) recommendation that work focus not on 38BK103 but on the associated slave settlement (38BK1011).

In order to minimize the impact this reduction had in the research design we attempted to place our units very judiciously, based on the initial shovel test survey, previous test unit results, topographic setting, and our experience at similar sites. Clearly this reflects a compromise between the ideal and the need for cost-effective investigations. While additional investigations, especially in the vicinity of Structure 8 and unit 1830R1380, would have been desirable, we believe that we have obtained adequate comparative data and are able to address our fundamental research questions.

As previously mentioned, the structures encountered at 38BK103 have been given a variety of designations and it is important to at least briefly remind the reader of those used in this study:

- Structure 1 is the main Crowfield mansion;
- Structure 2 is the east flanker of the main house;
- Structure 3 is the west flanker of the main house;
- Structure 4 is the east garden building;
- Structure 5 is the west garden building;
- Structure 6 is the privy west of the main house;
- Structure 7 is the smaller of the two barns in the southern portion of 38BK103;
- Structure 8 is the utility building in the southern portion of 38BK103; and
- Structure 9 is the larger of the two posited barns.

These designations are used throughout these discussions. Additional information concerning Structures 1 through 6 can be found in Trinkley et al. (1992).

Structures 7 and 9

Webb and Gantt (1991:256) recommended a 50 by 30 foot block excavation at what they called Structure 1, which they suggest to be a rice barn measuring about 44 by 25 feet (Webb and Gantt 1991:99). They explain that its features, including "its linear construction, exterior brick foundation capable of bearing heavy loads and the lack of kitchen-related artifacts within and around it," are adequate to support the interpretation of a barn (Webb and Gantt 1991:230).

While we were not as certain of its specific function, we did agree that it is a utility building producing very few artifacts. Consequently, we did

not believe that total excavation is necessary. Rather, we proposed sampling the interior with one to two 10-foot units and exploring the immediate yard area with several additional units. Coupled with this, we recommended excavations along the wall to further explore the builder's trench in the hope of recovering sufficient materials to provide a firmer construction date. We recommended a maximum of approximately 800 square feet of excavation at this structure.

Our initial approach was to clear the overlying vegetation and rubble in an effort to determine the exact size of the structure. Although it was reported to be 44 by 25 feet, we found it actually measures 51.0 feet north-south by 25.8 feet east-west, with its orientation being due north-south.

We began excavations at the southern end, opening one 10-foot square and one 5 by 10 foot unit at 1590R1400-1405 (Figure 9) and two 10-foot squares at 1590-1600R1440 (Figure 10). These were followed by the excavation of another 10-foot unit at 1655R1440, on the northeast corner of the structure (Figure 11).

These excavations revealed a mottled brownish-yellow (10YR6/6) sandy clay subsoil outside the structure. On the inside the subsoil varied from this same brownish-yellow sandy clay to a light yellowish brown (10YR6/4) sand. Above was a very dark brown (7.5YR2.5/2) loam with relatively large amounts of brick and mortar rubble (2,643 pounds of brick and rubble were collected from the 450 square feet of excavation). The quantity of brick rubble was consistently greater outside the structure then within, probably indicative of intentional demolition and scavenging of brick.

The excavations at the southern end of the structure revealed a distinct builder's trench, designated Feature 4, varying from about 0.8 to nearly 2.0 feet in width on the interior of the structure. Along the eastern edge of the structure there was a second builder's trench, designated Feature 5, which was only about 0.4 to 0.6 foot in width.

These features revealed that the wall was very poorly constructed, with a poorly executed footer one brick in depth along the interior of the western wall. Much of the footer in this area consisted of a single brick mortared up against the wall, some as stretchers and some as even bull stretchers. In effect there was no footer to spread the weight of the wall. Along the western portion of the southern wall there was a somewhat better laid footer, again only one brick in depth. This footer, however, does not extend to the southeastern corner. Along the outside the eastern wall there is a more uniformly constructed footer, with the bricks originating under the wall and forming a conventional footer to disperse the dead weight of the wall.

Of even greater interest was our discovery of a second, and earlier wall, just to the east. This earlier wall, designated Feature 6, had been entirely robbed out in this portion of the building. Further north, in 1655R1440, small portions of the wall were intact, although even here most of the wall had been entirely removed.

A stripped area, measuring about 200 square feet, was opened where we anticipated the northwest corner would be found. This work revealed an intact wall which had fallen or pancaked outward.

Our work, therefore, revealed the presence of two structures. The first, revealed by the robbed Feature 6, measured 71.5 by 41.5 feet, for a total floor area of nearly 2,494 square feet. This has been designated Structure 9. Much, although not all, of this building had been cleaned up, probably in anticipation of replacing it. Those areas not cleaned up were at the far north end where they probably wouldn't impede construction or use of the new building. The southern two-thirds of the building, however, had to be cleaned up since the replacement structure was to be built directly over the old one.

There is no evidence that the earlier building burned. In fact, the presence of a relatively intact wall at the northwest corner suggests either intentional demolition or perhaps building failure through earthquake or hurricane.

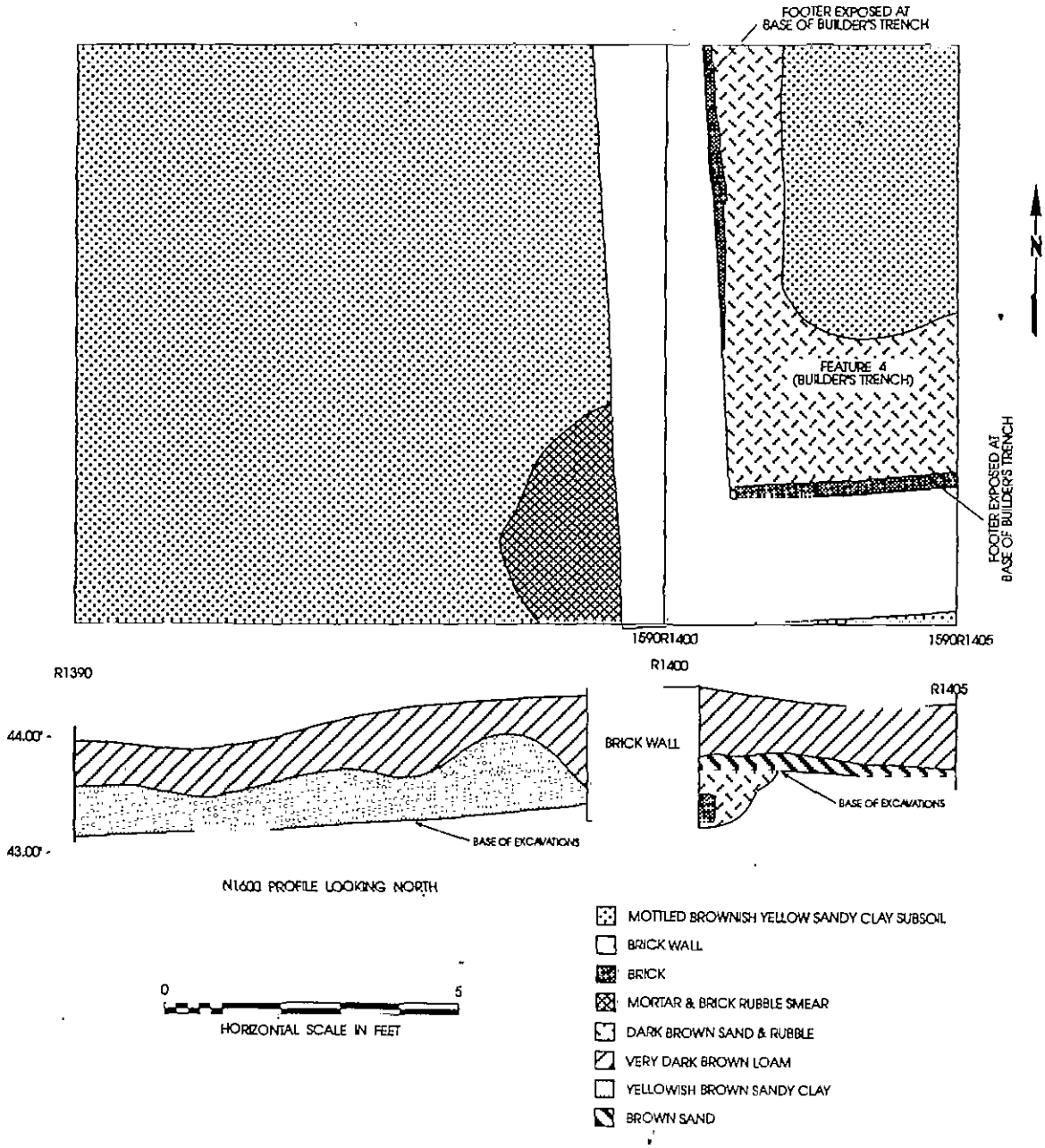



Figure 9. Excavations in 1590R1400-1405.

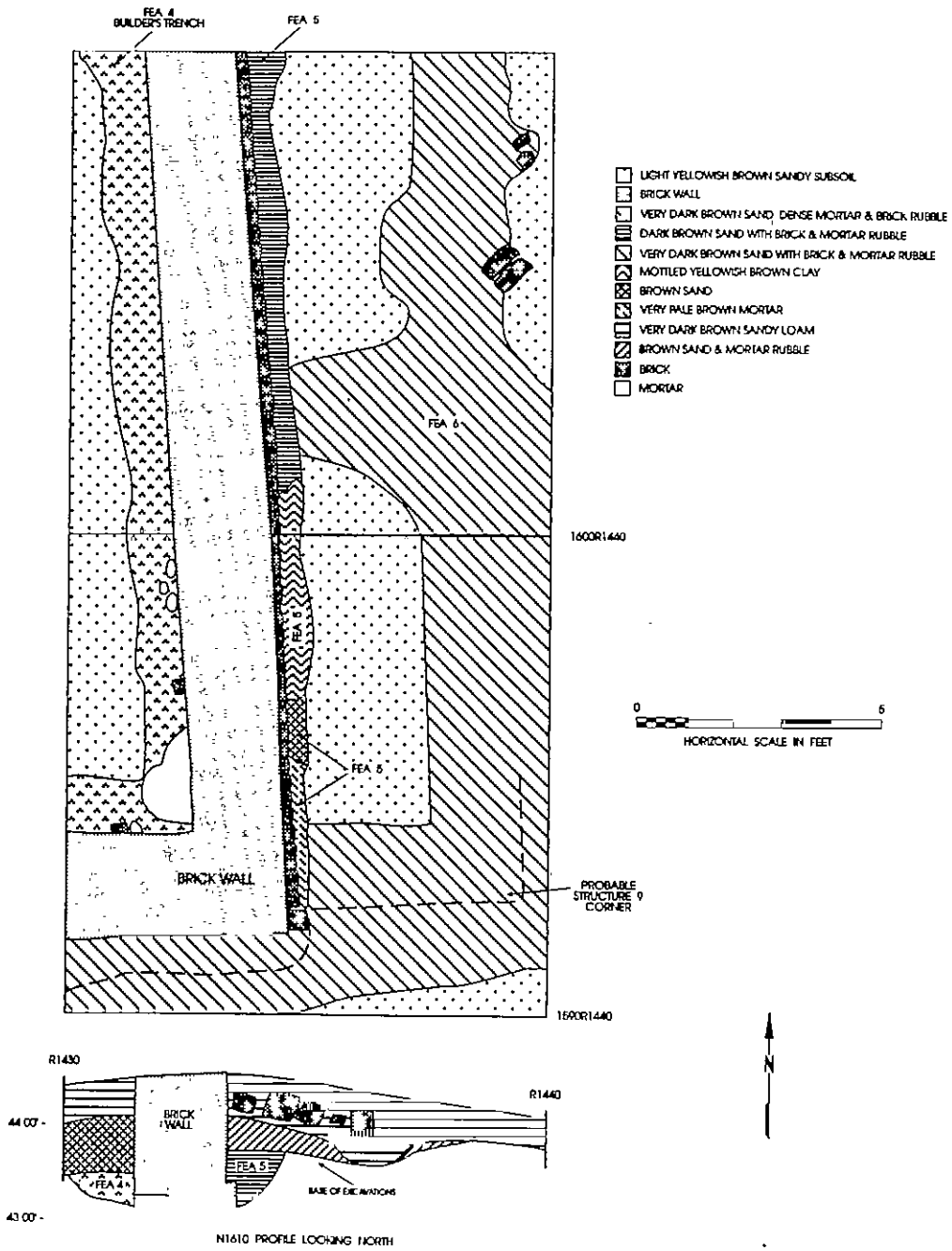



Figure 10. Excavations in 1590-1600R1440.

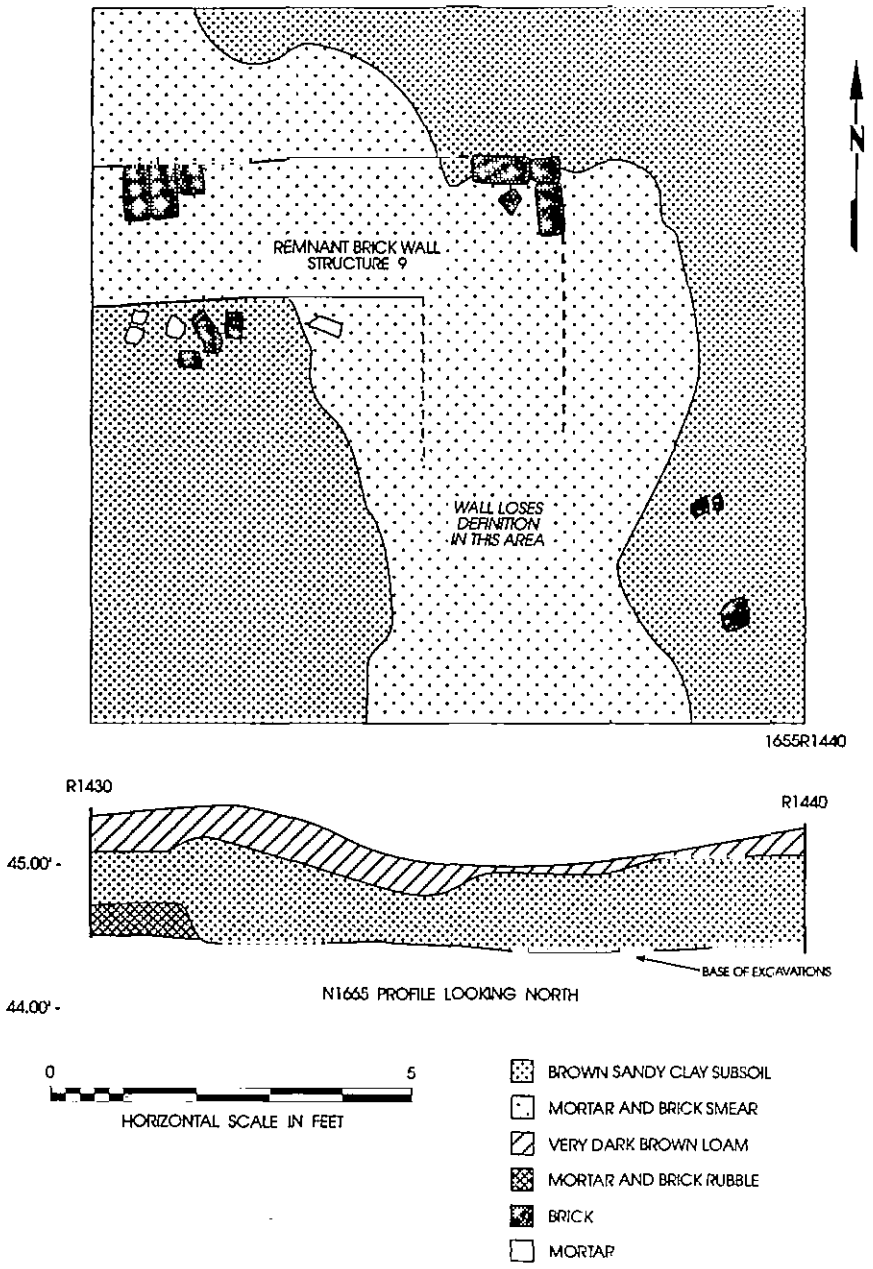



Figure 11. Excavations in 1655R1440.

The later building, designated Structure 7, was the one best preserved, measuring 51 feet by 25.8 feet (representing a floor area of about 1,500 square feet, or about 40% smaller than the original building). Its western and southern walls were rebuilt along directly over the earlier building, although it appears that none of the original foundation was incorporated into this later building. In addition, the earlier building was oriented just a few inches to the east of the second, and later, structure.

Although little can be said about the construction techniques of the first building, the replacement structure was poorly put up,[2] suggesting the lack of a skilled mason, a lack of oversight, or a building which warranted little attention to details. The latter seems unlikely considering its size and mass. The wall was 1½ bricks thick (about 1.1 foot or 13-inches) and probably laid in English or common bond — alternating courses of stretchers and headers. McKee (1973:48) notes that this bonding system produced a strong wall while requiring that only those bricks near the corners be cut. This style is typical of the eighteenth century (Lounsbury 1994:38; McKee 1973:48), rarely extending into the nineteenth century.

Webb and Gantt (1991:230) point to Michie's (1987:101) Richmond Hill barn as a similar structure. This Waccamaw Neck example measured about 34 by 80 feet, with a floor area of 2,464 square feet, just slightly smaller than Structure 9 at Crowfield. Its differences seem relatively minor, confined to the level of construction techniques (such as the narrower walls and reinforced corners). Other differences, however, may be more significant. The Richmond Hill barn apparently included windows (based on Michie's recovery of "relatively high number of window fragments" (Michie 1987:101). The abundance of nails also suggests a wood frame set on the brick piers. Although it is suggested to be a rice barn, even rice plantations required a variety of storage facilities and one might question whether so valuable a commodity would be stored in such a flammable building.

A somewhat similar building was excavated at the Shulbreed Plantation on Kiawah Island. There a brick building measuring 44 by 32 feet was encountered and interpreted to represent a barn (Trinkley 1993:213). Representing 1,189 square feet of interior space, this building is smaller than even Structure 7 at Crowfield. Nevertheless, it did have equally massive brick walls, rather than a wood superstory. Because of this, and the perceived value of cotton, it is thought to represent a cotton barn.

Review of the *South Carolina Gazette* did reveal one reference to "a very good brick barn, 42 feet by 22," suggesting both a considerable range in sizes and also that all-brick barns were important enough to merit a special mention (*South Carolina Gazette*, December 6, 1751, p. 3).

In sum, we anticipated the excavation of as much as 800 square feet at this structure. A total of 450 square feet of formal excavations were undertaken, along with 200 square feet of stripping (Figure 12). Our work revealed two buildings, with the larger one (Structure 9) being replaced by a smaller version (Structure 7). The replacement of the building was probably necessitated by some natural event, the most likely being a hurricane.[3] Additional analysis of artifacts and ecofacts may shed additional light on the function of the building, but based on purely technological grounds, there does appear to be good reason to believe this is a rice barn, probably used to store milled rice before it was sold. We anticipate that access was probably on its east elevation, which

[2] It is clearly substandard, not only because the footer was, at best, only one course (representing but two bricks), but also because there is no skim coat of mortar on which the footer was laid (Lynch 1994:II:20-21).

[3] A Great (Class 4) or Extreme (Class 5) Hurricane hit Charleston on September 15, 1752 causing extensive damage to low-lying structures and to ships. An unknown number of individuals were also drowned.

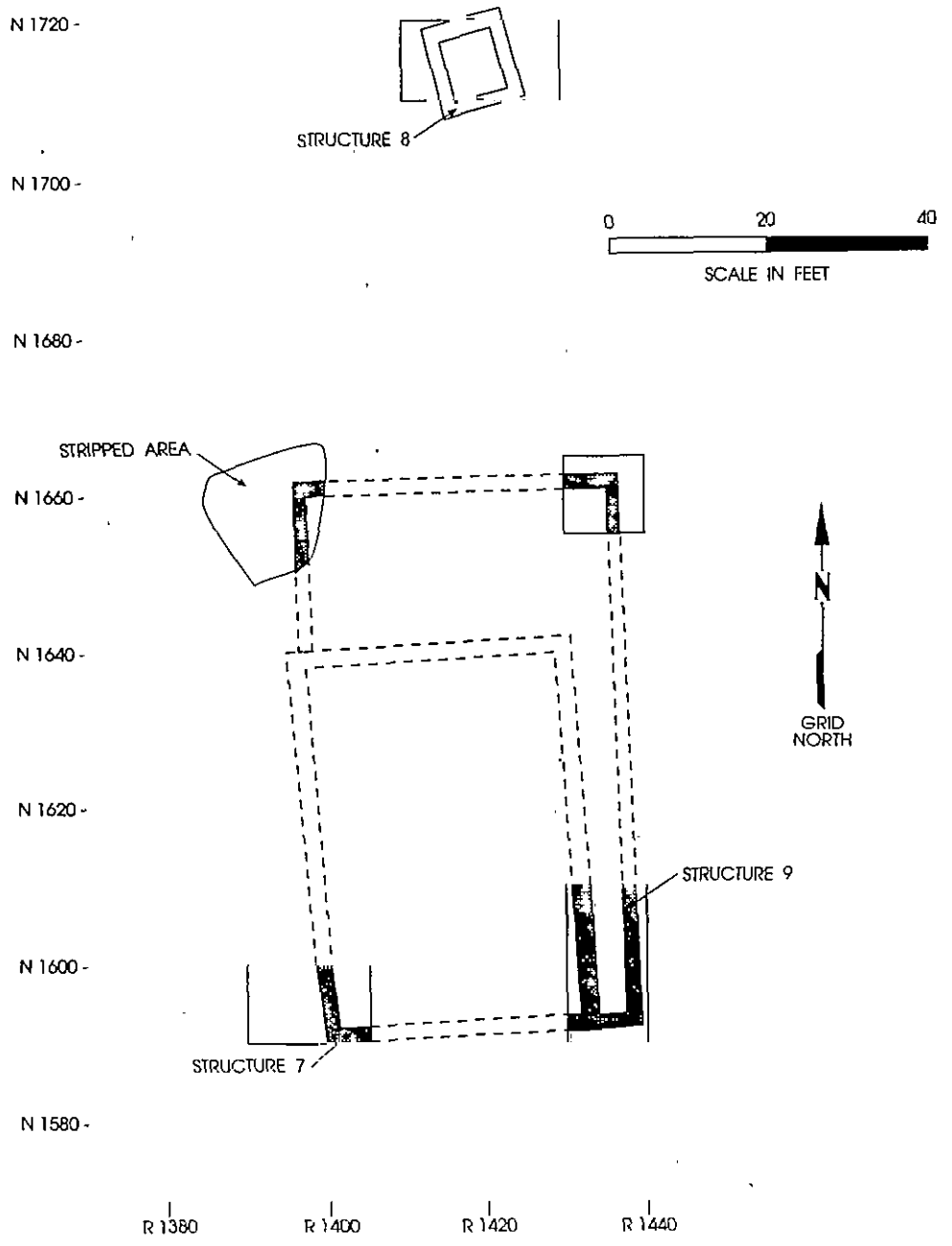



Figure 12. Structures 7, 8, and 9 at 38BK103 showing relative positions and orientations.

faced the Crowfield avenue.[4]

Structure 8

Webb and Gantt (1991:256) recommend a 15 by 15 foot block excavation at what they called Structure 2, situated at the north edge of that portion of 38BK103 being explored. They comment that it measures about 11 by 10 feet and has been extensively looted. They consider the possibility that it represents a cistern, well, or privy, before concluding that it was most likely a smokehouse, based on "the relatively high frequency of burned animal bones" (Webb and Gantt 1991:231).

Not knowing exactly how the grid would encompass Structure 8, we initially recommended up to a 20 foot block excavation, coupled with some yard excavations. As the work was undertaken this was scaled back.

We discovered that units 1710R1420-1430 encompassed the structure, which measure 10.3 feet north-south by 10.0 feet east-west (Figure 13). The extent of looting was immediately revealed once the overlying vegetation was removed. The interior of the structure was excavated to a depth of about 2 feet below the normal ground level, while what appeared to be spoil was heaped up around the exterior walls. The looters, however, had clearly been interested only in whole, saleable artifacts since the spoil piles contained abundant materials.

Excavation zones included spoil, which was found on the interior and exterior of the structure, overlying a Zone 1 soil similar to that found at Structures 7 and 9 — a very dark brown (7.5YR2.5/2) loam. Here, however, the brick rubble was almost exclusively confined to the spoil, which yielded 3,851 pounds of rubble. Although difficult to verify, it appears that what was excavated as spoil actually consisted of two distinct levels — a demolition level consisting primarily of brick rubble and an upper looter's spoil level consisting of soil and less brick. These, however, have become homogenized, making a clear distinction impossible. If this stratigraphic analysis is correct, it is likely that the building was demolished at some time prior to its looting.

Zone 1, in contrast, produced only 86 pounds of rubble. This was found only outside the building and represents the A or Ap horizon at the site. Subsoil was found to be either a brownish-yellow (10YR6/6) sandy clay or a light yellowish brown (10YR6/4) sand (Figure 13).

We discovered that while artifacts were abundant both within the structure and also in the spoil, their numbers declined dramatically outside the building (i.e., relatively few remains were found in the undisturbed Zone 1 soils outside the building). This was the primary reason that additional excavations were not placed in the yard area.

The building revealed a wealth of intriguing architectural information. The upper walls were 1.1 feet in thickness (also known as a brick and a half wall), being laid in English or common bond. The footer, which was seven courses, consisted of a wall 1.4 feet in thickness, also laid in English or common bond. A builder's trench was found on the interior of the structure, at the base of this wall. Designated Feature 8, this trench varied from 0.5 to 0.8 foot in width. It incorporated only one course of brick.

Given the thickness of the wall it could have been over a story, although this seems unlikely given its size. The large quantity of brick rubble present, coupled with the limited evidence of architectural remains, suggests that the building was entirely laid up in brick.

No opening was found on the south, east, or west elevation. Unfortunately the north elevation (along with the northwestern corner) has been extensively damaged, probably by logging in the last decade or so. This makes the identification of a opening impossible. Troubling is the apparent depth of the building, although we believe that

[4] There is a steep slope to the west and particularly the southwest, where there is low, wet ground. It seems unlikely that access was achieved from either the south or west. We cannot, however, rule out access along the north elevation.

much of the interior has been artificially lowered by looting efforts. The original floor was likely at the level of the footer. Since no joist sockets have been found on any of the remaining walls, there are two flooring possibilities.
The most likely, given the impressive construction features of the building, is that the footer ledge carried a plate which, in turn, supported the floor joists. While it is possible that the building had an earthen floor, this seems out of character given the massive and well-laid walls.

While this architectural evidence may not reveal the building's function, it does help us exclude some possibilities. For example, there is no stucco on the brick walls, so it is unlikely that Structure 8 served as a cistern. The solid subsoil floor, at a relatively high elevation, precludes a well. Neither the internal brick walls or the buried brick rubble provide evidence of smoke blackening, characteristic of a smokehouse. There is also no evidence of a buried flue to provide ventilation. Further, smokehouses smoke meat, they do not cook or burn the meat and associated bones. The absence of a chimney on such an otherwise well made building suggests that it was not domestic (although there is domestic trash around and in it).

The most convincing explanation is that Structure 8 represents another utility building. When it was no longer needed, or collapsed (perhaps from the same event which destroyed Structure 9), it began to be a convenient repository for plantation trash. Unfortunately, the looting makes it impossible to separate what was discarded during the use of this building from those materials discarded there after abandonment.

1720-1740R1320

This was the location of Webb and Gantt's Unit 7, which produced a trench they interpreted to be structural (Webb and Gantt 1991:231). Based on this they recommended a 20 by 20 foot block excavation. Our assessment, however, suggested that no more than 200 square feet of excavation was warranted.

Three 5 by 10-foot units, 1720-1740R1320, were excavated forming a 5 by 30 foot trench in the general area of Webb and Gantt's Unit 7 (which could not be precisely located). Although the upper 0.8 to 0.9 foot of soil was removed as Zone 1, terminating on a mottled yellowish brown (10YR5/8) clay or a mottled brown (10YR5/3) sandy clay subsoil, the profile revealed considerable complexity (Figure 14).

At the south end of the trench Zone 1 consisted of either brown (10YR4/3) sand or very dark brown (10YR2/2) loam. Underlying this in the central portion of the excavations was a pile of dense brick fragments mixed with phosphate rock in a matrix of brown sandy clay. Moving the north the brick became crushed and decreased in density. At the north end of the trench Zone 1 consisted of very small fragments of brick mixed with phosphate rocks, all in a brown (7.5YR4/3) sand matrix.

Artifacts were sparse in the excavations and bricks are the most common feature. The 150 square feet of excavation yielded 961 pounds of brick rubble and phosphate rock. The brick was all clean, evidencing no adhering mortar or use. Nor was any mortar found loose. These bricks appear to represent discards never used for construction.

At the base of the excavations, in the central portion of the excavation, the dense concentration of brick and phosphate rock penetrated the subsoil. This was designated Feature 3. The exposed portion, which extends into the east profile, was centered at 1740.2R1318.6. Its maximum exposed length was 4.2 feet and the width was 2.7 feet. Although almost no artifacts were recovered in the feature it did contain 34 pounds of rubble (including brick and phosphate rock). It appears to represent an intentionally filled drainage ditch excavated about a foot into the subsoil.

The debris at this location appear to date from the postbellum, when phosphate mining was common in the Summerville area. These materials are suggestive of mining elsewhere, with discard on this portion of the site. In general, the soil and phosphate rock are consistent with excavated phosphate spoil. The brick, as previously mentioned, appears unused, although its origin cannot be determined. Webb and Gantt's unit was

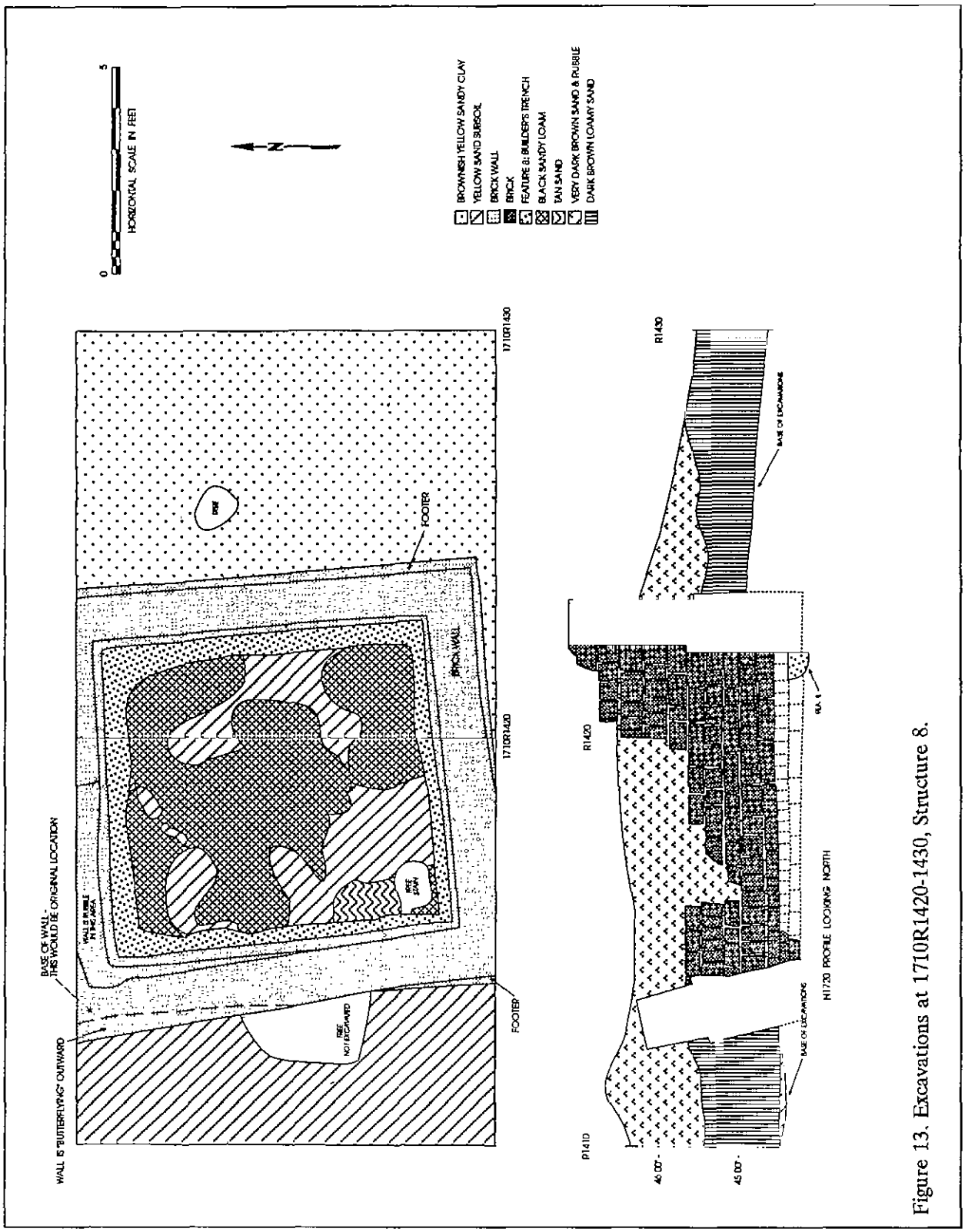



Figure 13. Excavations at 1710R1420-1430, Structure 8.

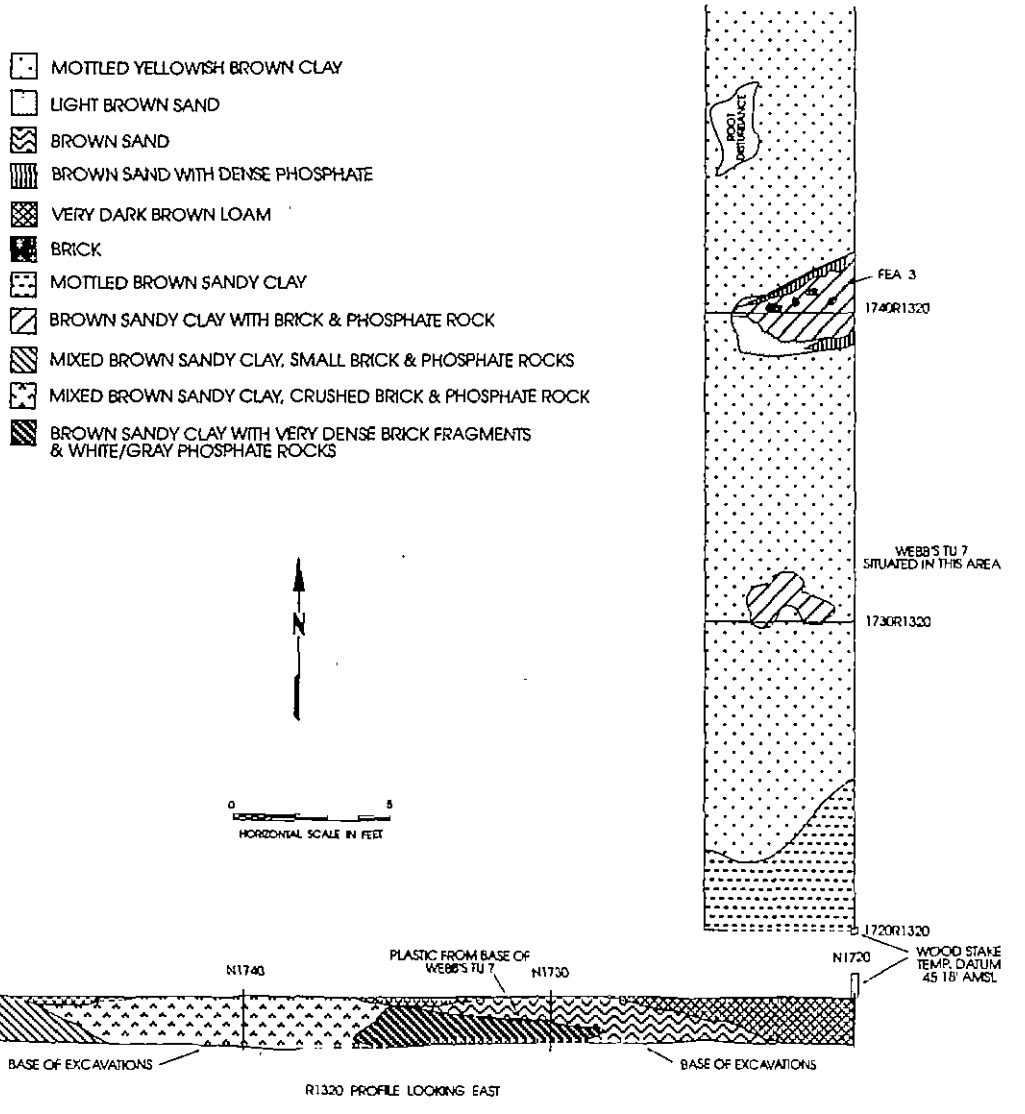



Figure 14. Excavations in 1720-1740R1320.

terminated within the upper half of Zone 1. Subsoil was never reached and the structural trench they reported was likely only a lens of disturbed soil from the phosphate spoil. This unit very clearly demonstrates the danger of attempting to interpret too much from small excavations.

1640R1250

Webb and Gantt report that their Unit 7 was located at 1640R1245, although it is shown on their maps at 1640R1265 (Webb and Gantt 1991:115; Figure 5.10). We were finally able to locate this unit at 1645R1251. Based on their reported recovery of two features and two post holes, they recommended a 20 by 20 foot block excavation. Although we were concerned about their interpretations, we also believed that upwards of 200 square feet might be necessary to fully explore this area.

Once we were able to identify a sunken depression which we believed might represent their previous excavation, we laid in a 10-foot unit at 1640R1250. This unit revealed a thin A horizon, measuring only 0.2 foot in thickness. These soils, dark brown (10YR3/3) loams, overlaid a dark yellowish brown (10YR4/4) sandy clay subsoil. The thin A horizon, coupled with the dark subsoil resulted in our excavation intruding about 0.3 foot into the subsoil (Figure 15). This revealed the floor of the Webb and Gantt unit.

In the northwest corner, at 1649.5R1245.5, was a mass of brick in a dark yellowish brown (10YR4/4) sand matrix. Designated Feature 7, it measured 0.75 foot in width and the exposed length was 2.0 feet. No corresponding stain could be identified. Upon excavation it was found to have a depth of 2.01 feet with straight walls and a rounded base. The feature produced a total of 169 pounds of brick rubble. No mortar was found in the fill, nor was any adhering to the brick. Further confounding interpretation, this feature produced no artifacts.

This appears to be Webb and Gantt's Feature 1, although their feature was reported to run across much of the north profile of the unit. In addition, while they confirm that the feature was filled with brick, they report the presence of mortar, which was absent in our investigations. Further, they terminated the feature after about 0.4 foot of excavation, while it was clear from our work that the feature actually extended much deeper (with brick rubble extending to the base). Although they interpreted this feature as a "structural trench," this seems highly unlikely given the depth, the presence unarticulated and unmortared brick, and the absence of artifacts.

Although this feature might well have made more sense with additional exposure and excavation, this did not seem cost-effective. We are inclined to believe that the feature represents a portion of a filled-in drainage ditch. As such, no further excavation was deemed appropriate.

Webb and Gantt's Feature 2, found along the south profile and identified as "a section of a structural trench," was found to represent root smear.

Webb and Gantt also reported two round post holes "just north and south of Feature 1," although neither was excavated. Our excavations failed to identify these stains and we are inclined to believe that they were probably root mottles. Our work did, however, reveal the presence of one post hole, at 1648.8R1249.4. This corresponds to a brown sand stain which Webb and Gantt noted, but attributed to an unusual elongation or beak associated with their Feature 1. Upon excavation this post hole was found to circular, about 0.6 foot in diameter, and to extend 0.8 foot, evidencing a rounded bottom.

Webb and Gantt understandably had difficulty interpreting this unit since the subsoil was heavily mottled. Features and root stains were at best indistinct and difficult to interpret. We were more successful in our efforts primarily because of a larger excavation unit and our effort in scraping down the unit and evaluating the stains. We may also have been helped by extending the northeast quadrant of 1640R1250 deeper than the remainder of the unit, allowing better definition of features.

Otherwise, this excavation area produced a very low density of artifacts and no further

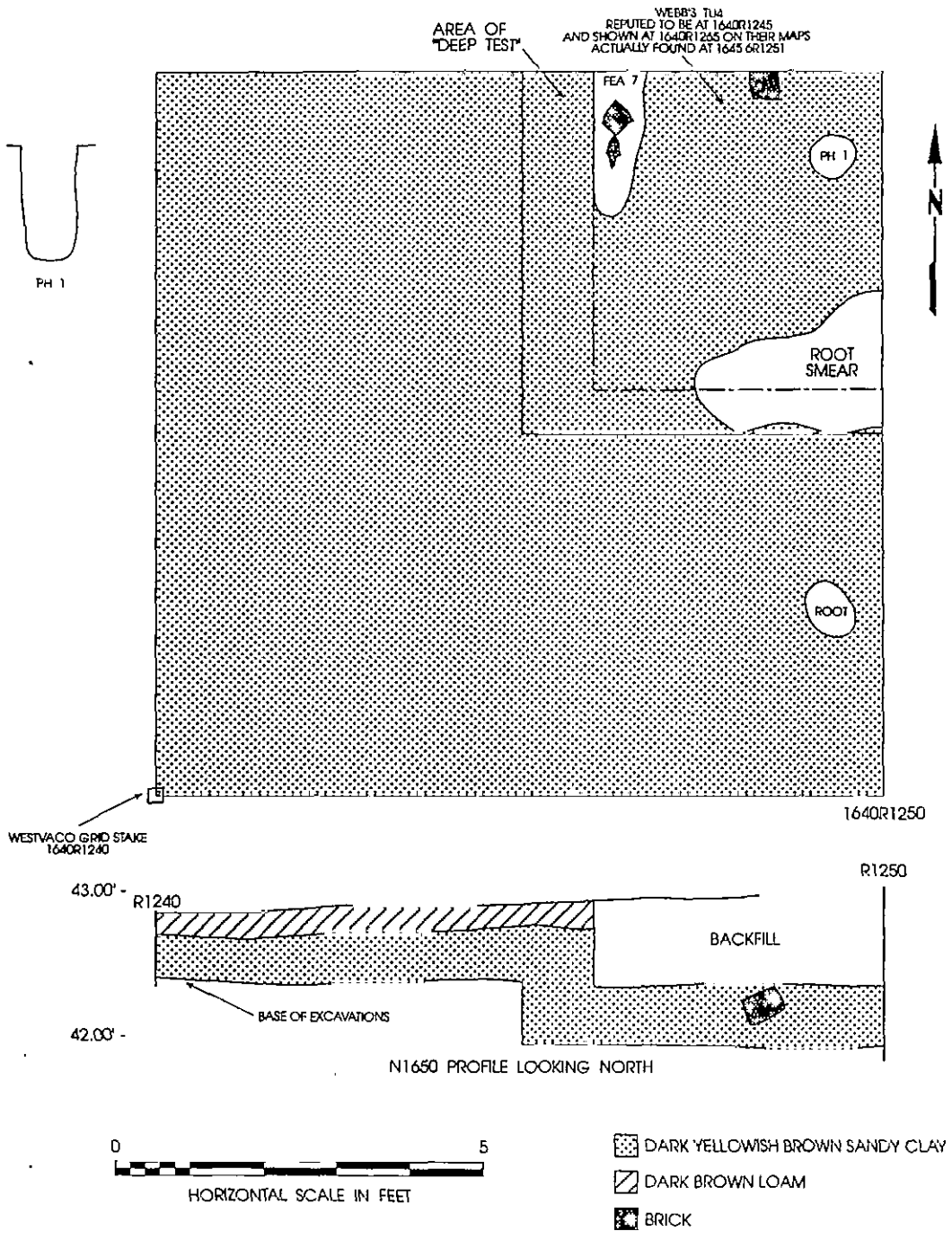



Figure 15. Excavations in 1640R1250.

investigations were undertaken.

1830R1380

Webb and Gantt's Unit 16 (situated at 1831R1380) was placed "in an area of brick and mortar concentration" (Webb and Gantt 1991:126). The excavation produced a stain they interpreted to be two intersection wall trenches. They also report that the unit produced the "highest quantity and diversity of artifacts within the sampled portion of 38BK103," although the vast majority of the collection consisted of only Colono ware sherds and "black" bottle glass (Webb and Gantt 1991:130, Table 5.7). Nevertheless, Webb and Gantt (1991:256) recommend a 20 by 20 foot block excavation. Based on the material recovered, we recommend a total of no more than 200 square feet.

An extensive search for their Unit 16 proved fruitless. We were unable to identify any sunken area, backfill, or black plastic sheeting. We laid in a 10-foot unit at 1830R1380, which should have incorporated at least a portion of their unit, but no evidence was found even during excavation.

What we did discover was about 0.3 to 0.4 foot of black (5YR2.5/1) loam overlying a mottled light olive brown (2.5Y5/4) sandy clay subsoil (Figure 16). A deep test excavated in the southeast quadrant of the unit revealed that this soil graded into a reddish yellow (7.5YR6/8) clay at a depth of about 1.2 feet (45.15 feet AMSL).

Excavations in this area of the site yielded only 8 pounds of brick rubble, so we would not consider this much of a concentration. Regardless, artifact density did increase with a variety of ceramics being recovered. In spite of this increase in density and diversity, no features were identified. The relatively dark subsoils coupled with an abundance of root and tree disturbances suggests that the structural trenches Webb and Gantt observed may have been natural. However, not being able to relocate their original test unit, we cannot preclude that some structural remains were present somewhere in this vicinity. We decided that additional investigation in this area, absent a clear direction, would not be profitable and no further work was conducted.

**Results at 38BK1011**

We recommended approximately 2,800 square feet of excavation at the slave settlement designated 38BK1011. Coupled with this we also suggested that small areas might be stripped for exposure of features. A total of 836 person hours were devoted to work at 38BK1011. A total of 2075.5 cubic feet of primary excavation was conducted between February 12, 1996 and March 6, 1996. The controlled excavations exposed 2,600 square feet of site, while mechanical stripping exposed an additional 2,139 square feet, for a total exposure at 38BK1011 of 4,739 square feet.

Unlike 38BK103, we had not conducted previous work at 38BK1011 and both features and structures were numbered sequentially beginning with the number one. Our discussion of the excavation areas, however, is organized by grid designations, from south to north and west to east (i.e., 100R100 is discussed before 200R100 and 100R200 follows the discussion of 100R100).

1210-1220R960, 1220-1230R970

These four 10-foot units were placed in the vicinity of Webb and Gantt's Unit 6, a 5 by 8 foot test pit situated at 1213R968. They remark that the unit produced a rather large quantity of artifacts (20.9 artifacts/ft$^3$), although here (like elsewhere at the site) Colono ware pottery dominates the collection. They also identified what they called a "structural trench," although they chose not to screen the excavated fill, commenting that they had a sufficiently large collection from the unit excavation (Webb and Gantt 1991:139). They conclude that:

> The presence of Feature 1 indicates . . . Test Unit 6 was placed on an exterior wall of a domestic structure. The high artifact yield suggests that a discard area adjacent top the wall was also sampled. Based on the test unit plan view . . . the orientation of this structural

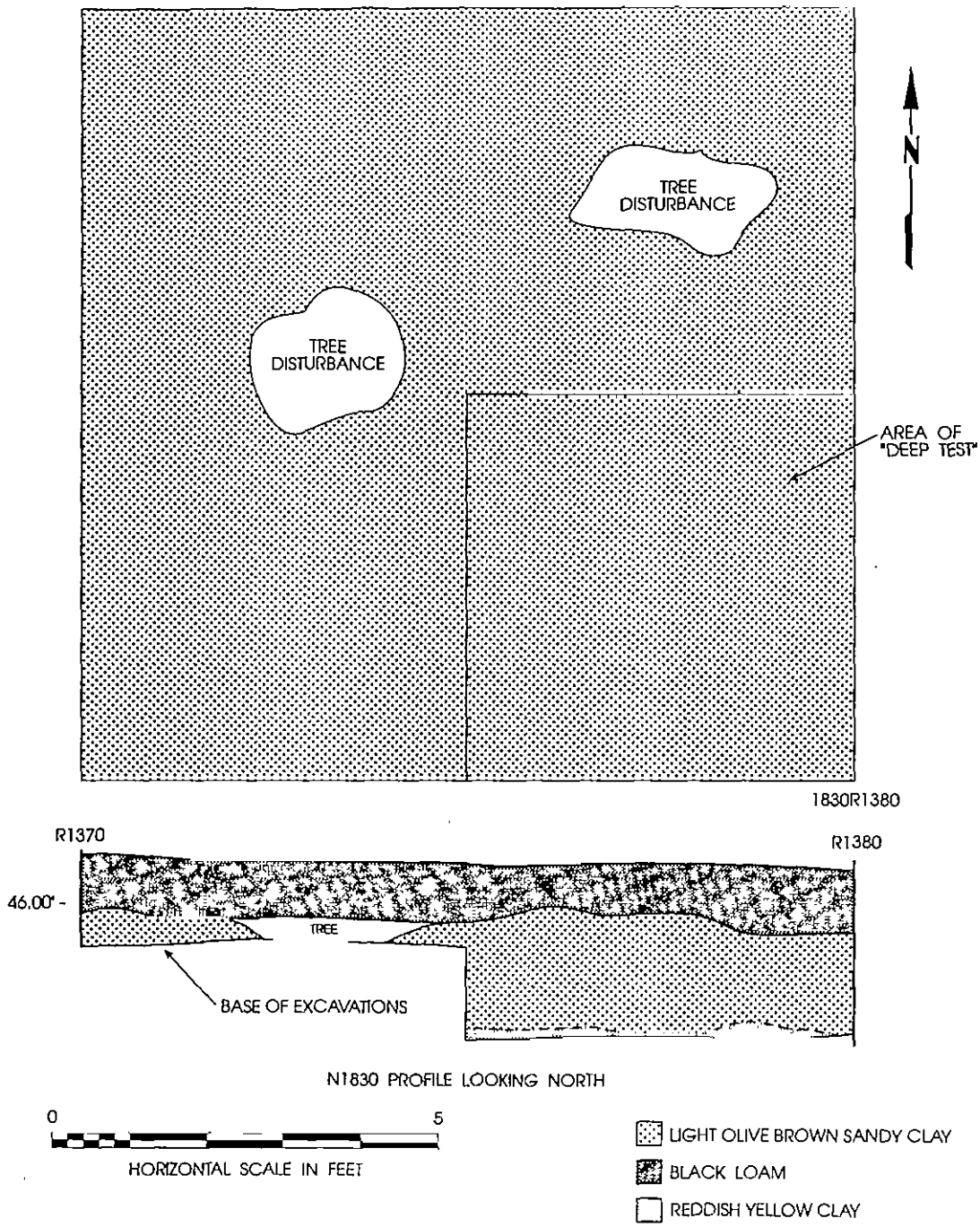



Figure 16. Excavations in 1830R1380.

> trench is not clear, nor could it be determined if the trench is linear. It is possible that the trench underwent several rebuilding episodes, during which time the orientation and nature of the trench was obscured (Webb and Gantt 1991:146).

As a result of this extraordinary interpretative leap they recommended the excavation of 400 square feet to expose the reputed structure. Our excavations in this area were based on that recommendation and while little of their reconstruction proved correct, the unusual findings nevertheless justified the level of effort.

Excavations in this area (Figure 17) revealed a black (5YR2.5/1) humic sand about 0.4 foot in depth (excavated as Zone 1) overlying a brown (7.5YR4/3) sand (excavated as Zone 1a). This, in turn, graded into either light yellowish brown (10YR6/4) or white to pale yellow (2.5YR8/1.5) subsoil. Artifact density was noticed to decline dramatically from Zone 1 into Zone 1a, with most of the specimens from Zone 1a likely associated with the upper fill of the feature cutting through the four units. Brick was very sparse, accounting for less than 2 pounds in the four units.

Feature 10 likely originated in Zone 1a, although the relatively dark soils precluded its definition until the lighter subsoil was reached. For this same reason, it was impossible to follow the feature southward to the N1210 profile — the soils were simply too dark to allow delineation.

Feature 10, as mentioned, extends through all four units as two arcs of brown (7.5YR4/3) sand. That portion designated Feature 10a begins in 1210R960 and arcs northward into 1220R960 where it begins to curve eastward, terminating at the northeast corner of 1220R970. Feature 10b arcs out of Feature 10a just inside unit 1220R970 and terminates in the east central wall of 1230R970 (Figure 17).

Excavation found the trench to be highly variable in depth, ranging from 0.4 to 0.75 foot. Of course, to these should be added perhaps an additional 0.3 foot representing that portion of the feature contained within Zone 1a. The width of the trench similarly varies, ranging from 0.9 foot to 1.5 feet. In general the feature exhibited straight sides and a flat, regular bottom. Only at the southern end of Feature 10a were the sides sloping.

The feature fill produced relatively few artifacts, suggesting that at the time the trenches were excavated, and backfilled, few artifacts were present on the surface of the ground. Moreover, this suggests that the two "arms" or arcs are either roughly contemporaneous or that few artifacts were deposited between episodes.

Although there are no post holes evident at the base of the trench, we believe the feature may represent some type of fence, probably an animal pen. The shape is entirely inappropriate for a domestic structure. In addition, the stratigraphy suggests a function with little domestic activity at the time of construction, but increasing discard behavior afterwards. The rich, black humus found in this area of the site may provide evidence of an artificially nourished soil. It seems likely that a pen area, with its own distinct smell and proscribed use, would have been used for the discard of domestic trash, just as marsh and swamp land is known to have been used for the same purpose.

Estimating the circumference of the arc, the southern pen may have enclosed an area about 40 feet in diameter. The northern arc, represented by Feature 10b, appears to be a repair, perhaps an enlargement of the original pen.

While little studied, there is a characteristic wood fence found associated with black communities all along the Carolina coast, from the Beaufort area northward to Sandy Island in Georgetown County. Consisting of upright slats nailed to supports, it extends from below the soil surface upwards four or so feet. Curiously, this fence form shows clear historic antecedents in West Africa and may represent yet another "Africanism" brought to this area by African slaves (Hamer and Trinkley 1997). It seems likely that the archaeological feature evidenced at 38BK1011 may represent this type of fencing. Although we have been able to document its use only around

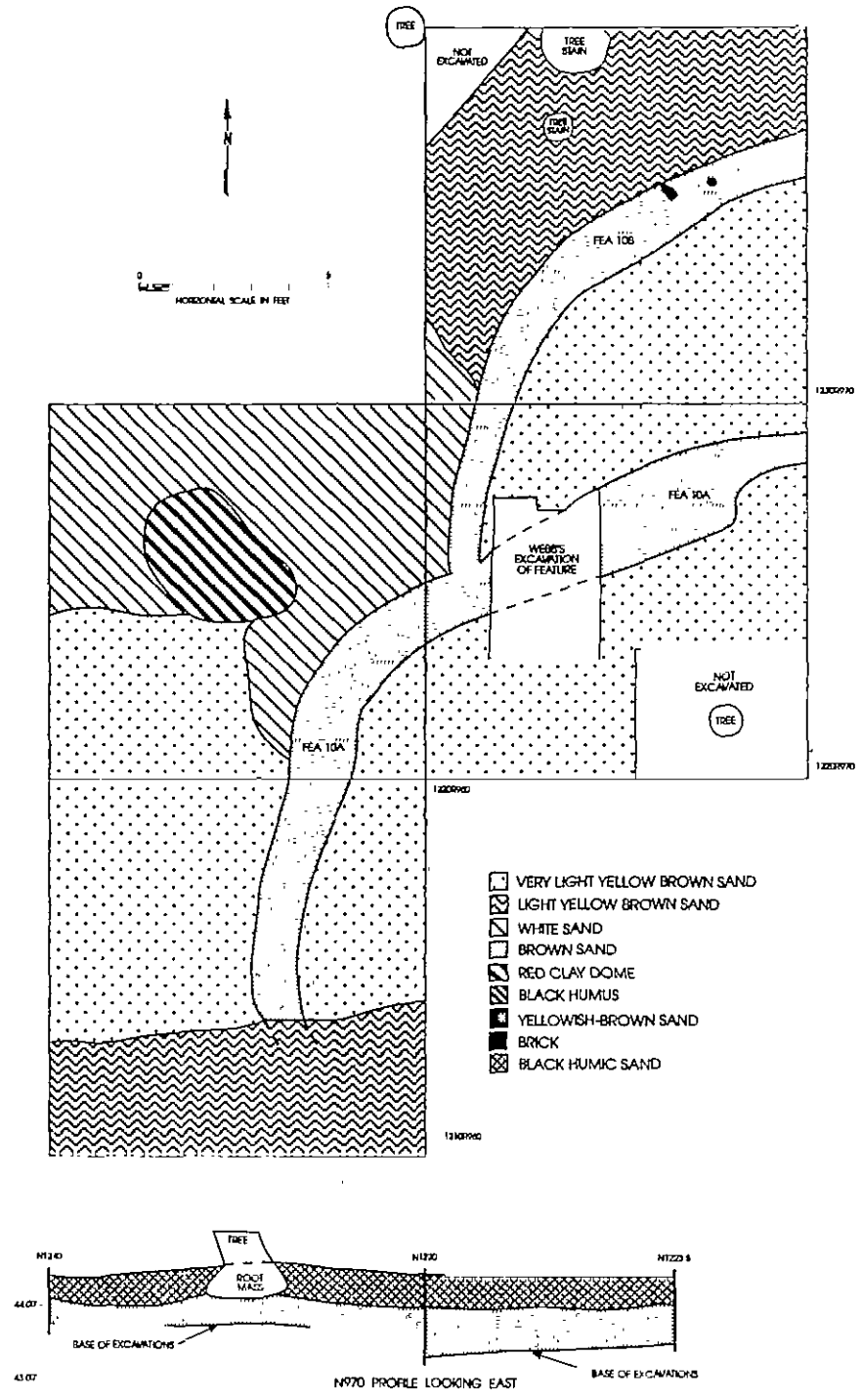



Figure 17. Excavation in 1210-1220R960, 1220-1230R970.

structures, there seems to be no reason that it would not also be used to pen animals.

1350R1210

This 10-foot unit was laid in to investigate Webb and Gantt's Unit 5, supposedly situated at 1350R1205. It was found at 1357.8R1205 (Figure 18). Webb and Gantt reported a wide variety of artifacts from this location, including the presence of a higher than average assemblage of European wares. They observed that this high frequency:

> suggests that the inhabitants of this structure [thought to located in the vicinity of the domestic refuse] might have been high in the Crowfield slave social hierarchy (Webb and Gantt 1991:168).

It was for this reason that they recommended the excavation of 400 square feet. We proposed to reduce this to a maximum of 200 square feet.

Our excavations revealed a black (5YR2.5/1) humic loam about 0.5 to 0.6 foot in depth overlying a brown (7.5YR4/3) sandy loam about the same depth. The subsoil in this area is a mottled light yellowish brown (10YR6/4) sand. No features were encountered in the excavation and the artifact density or variety did not impress us as appreciably different from other site areas. Based on this, and the lack of features, we chose to limit our excavation in this area to the one unit.

1420-1430R910-930

Webb and Gantt excavated their Unit 3 at 1426R925 in "an area that yielded large quantities of kitchen group artifacts during shovel testing" (Webb and Gantt 1991:182). Their excavations yielded a plan view of highly mottled soil (see, for example, Webb and Gantt 1991:Figure 5.27). In fact, their level 2 was removed "to clarify features obscured by mottling," with the result that they identified two trench-like features which were interpreted to represent the remains of a "double bay structure" (Webb and Gantt 1991:186). Also present were three post holes. In addition, they reported a "large and varied artifact assemblage," with most being kitchen-related, including Colono ware, ceramics, and bottle glass. They conclude that:

> Test Unit 3 was placed on the remains of a slave cabin at the juncture between the exterior wall and what appears to be an interior wall that divided the structure into two bays. Two exterior wall trenches with supporting posts were identified. The fact that the interior wall does not appear to have been rebuilt, suggests that the house form may have changed over the structure's occupational span (Webb and Gantt 1991:192).

Based on this, they recommended the excavation of a 40 by 20 foot block to fully expose the structure (Webb and Gantt 1991:257).

In an attempt to follow this recommendation we first sought to relocate their test unit. No evidence of the unit could be found on the surface, or during the subsequent excavations. In comparing the plan view provided by Webb and Gantt to Figure 19, there is a very similar stain in the vicinity of 1431R925 — the approximate location of their Unit 3. Their features, however, were revealed to be plowscars. In spite of this, the excavations were very product, revealing seven features and four post holes.

The six 10-foot units we excavated in this area revealed a dark grayish-brown (10YR4/2) sand plowzone about a foot in depth. At the base we found light yellowish-brown (10YR6/4) sands with areas of darker sand and, in units 1420R910-920, a dome of strong brown (7/5YR5/8) clay. Another similar clay dome, in 1430R910-920 was apparently mined by Feature 8 (discussed below). As Figure 19 reveals, these units presented a very complex picture and considerable effort was spent attempting to understand these remains. Artifacts, while relatively dense in this area, were dominated by Colono ware pottery. A total of 42 pounds of brick was recovered from the block.

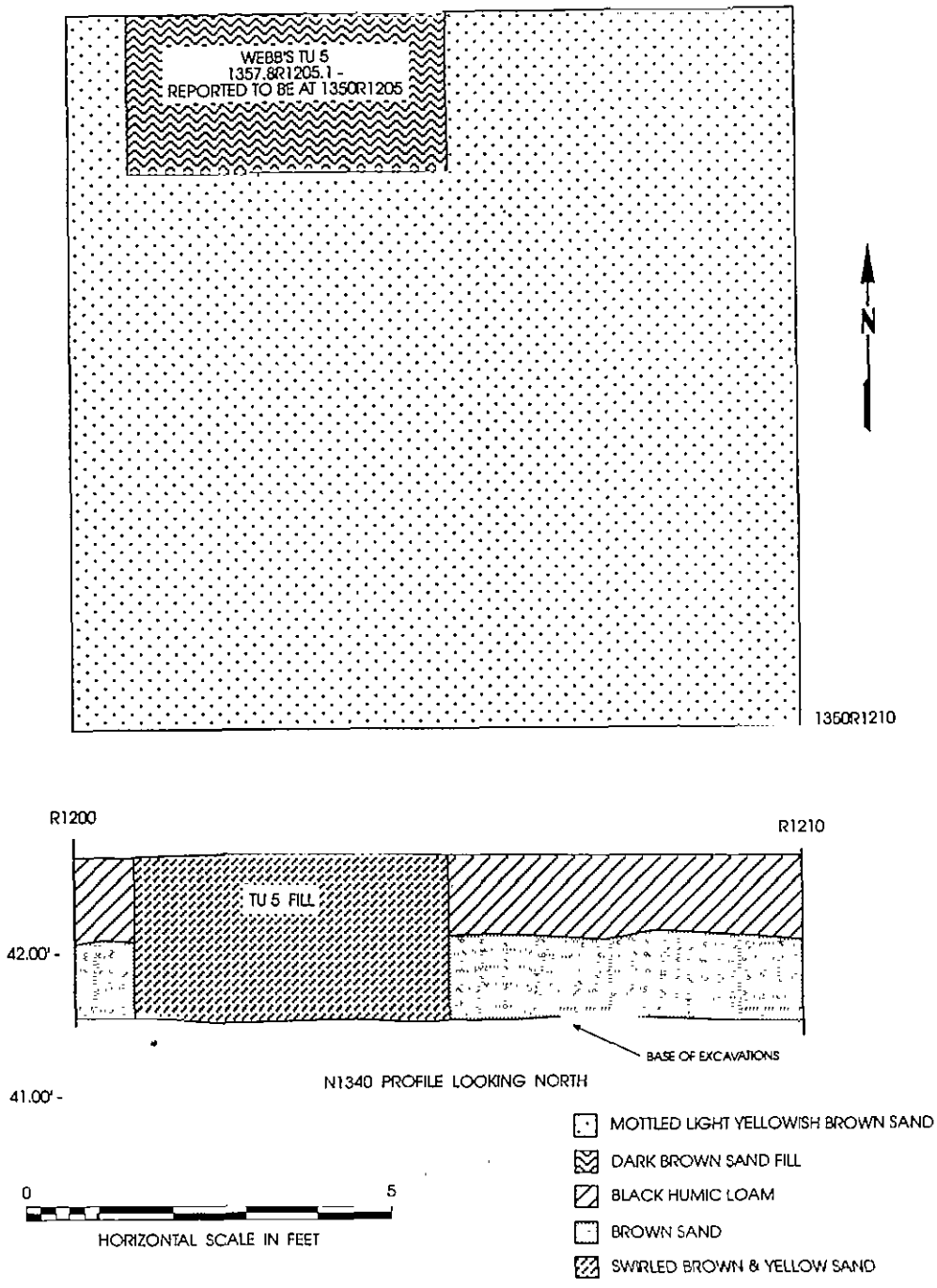



Figure 18. Excavations in 1350R1210.

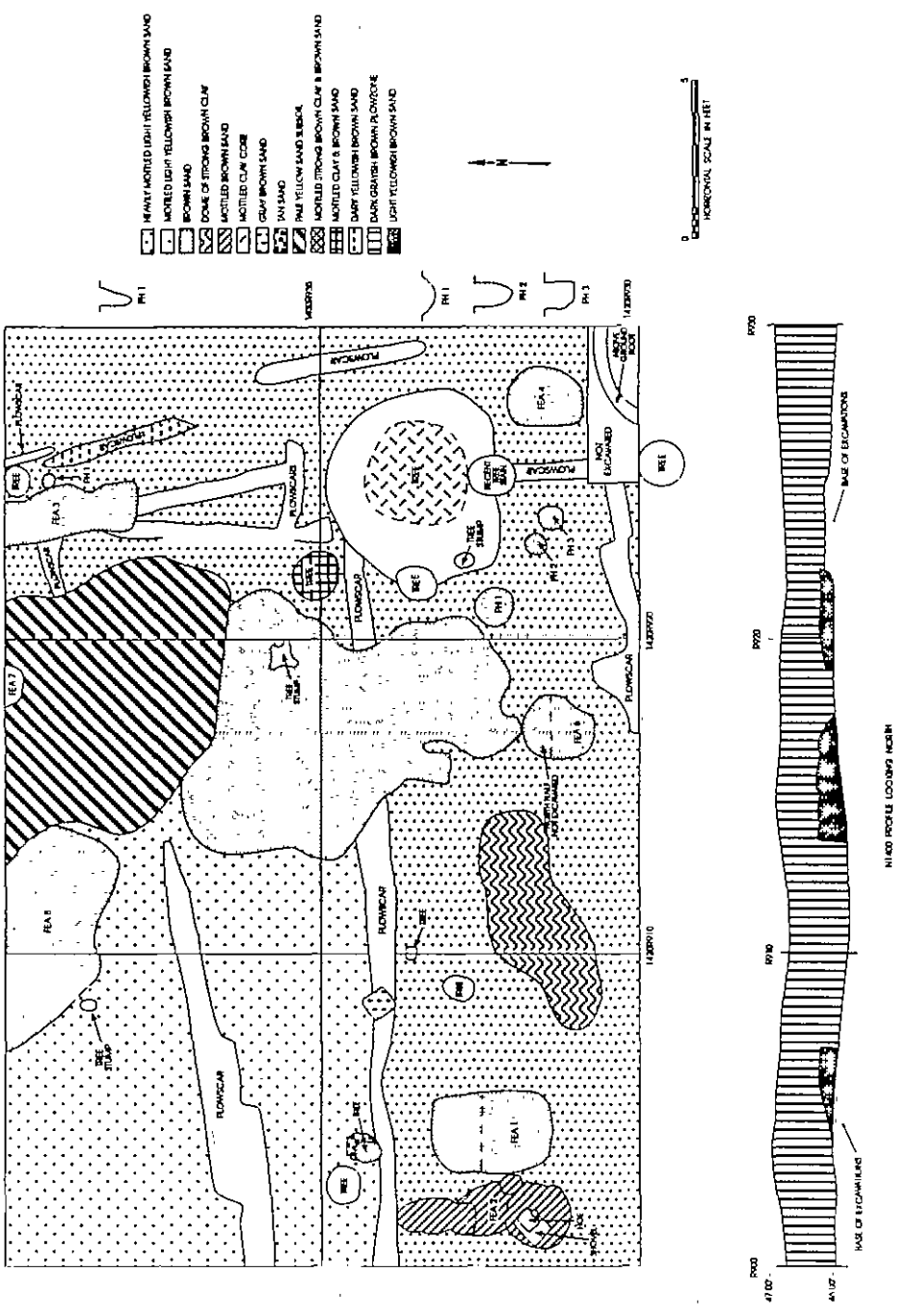


Figure 19. Excavations in 1420-1430R910-930.

Five of the features (Features 1, 3, 4, 6, and 7) represent large post supports for a building at this location. Designated Structure 1, Feature 1 formed the southwest corner, Features 4 and 6 were along the south wall, and Features 3 and 7 were along the north wall. The northwestern corner was outside the excavation area, as was the eastern end of the structure.

Features 1, 4, and 6, supporting the south side of the structure, were all filled with brown sand with mottled of clay. Feature 1, at 1424.5R904.5, was rectangular in shape with straight sides and a flat bottom. It measured 3.8 by 2.5 feet and was 0.55 foot in depth. The feature evidenced sparse remains — a few Colono ware sherds, several nails, and fragments of "black" glass. Feature 4, found at 1423R928, was also rectangular in form, measuring 2.6 by 1.8 feet. It also had straight sides and a flat bottom, although its depth, 0.82 foot, was greater than that of Feature 1. Artifacts were similarly sparse. Feature 6 was situated at 1422.5R917.2 and measured 2.6 by 2.0 feet. This feature represented an oval basin about 0.3 foot deep, with a post hole penetrating its southeast quadrant, to a depth of 1.4 feet. At the base of the post hole charcoal was very abundant, suggesting that the post may have been charred to reduce insect attack and decay.[5] It appears that when the initial support weakened or was compromised, a charred post was set in a hole about 0.8 foot in diameter just beside the original support. This sort of repair would help to support a sagging sill plate.

Features 3 and 7 are found along the north wall of the building at 1430R924 and 1439.8R918.2 respectively. Feature 3 is a rectangular pit measuring about 3.0 by 1.3 feet with sloping sides and a rounded bottom. Unlike the other supports for Structure 1, this feature is deep, excavated to a depth of 1.15 feet, although artifacts continue to be sparse, consisting of what appears to be yard debris or "sweepings." Only a portion of Feature 7 was exposed by the block excavation, so the length could not be determined. The width, however, is about 1.8 feet and the depth is 0.7 foot. The sides were relatively straight and the floor of the pit was flat.

These features reveal that Structure 1 was 18 feet in width and no more than about 37 feet in length, with a total floor area of upwards of 670 square feet. This, of course, is far in excess of single slave houses during either the eighteenth or nineteenth centuries (see, for example, Hamer and Trinkley 1997). In reviewing all of the excavation data, we have become convinced that the large mass of brown sand in the center of the block excavation, at 1430R917, represents some form of internal chimney, dividing the space into two bays, each probably represented by a slave family.

Originally this stained area was interpreted to a slightly low pot, filled in with plowzone soils. However, not only is the brown soil stain in the central portion of the structure, but it consists of the same friable brown sandy loam found as fill in all five features. The shape is vaguely rectangular or linear, measuring about 9 by 6 feet, about that necessary for a central chimney support. Artifacts continued to be found in this matrix, which might indicate either feature fill or, as originally suspected, Zone 1 soils. Careful analysis of the drawings and photographs, however, reveals that the stain is bisected by a plowscar, suggesting a slight different in color and texture between the two.

Other pits found in this block excavation include Features 2 and 8. Feature 2 is situated in the western third of 1420R910 at the base of Zone 1. It was initially recognized by the presence of a hoe discovered during unit excavations. Although this tool was left in situ, we were unable to discern well defined edges. Instead, the hoe seemed to be situated in a rather amorphous mass of highly mottled brown sand. Feature excavation began to the south of the hoe and we were able to discover a well defined base and better defined pit edges which were carried up to the base of Zone 1. Upon excavation we discovered that the hoe was

[5] An 1825 building guide commented that, "the most effectual mode of preserving timber from decay is to char it; . . . charcoal being the greatest anti-putrescent known, and no moisture within the influence of its action will become putrid or decomposed: (quoted in Fitchen 1986:133).

laying on top of a shovel, as though both had been discarded together in the pit. The north-south profile, 5.4 feet in length, revealed that the feature consisted of at least two features — one to the north and the other to the south — which have blurred together. The width of the pits, while not uniform, averaged about 2.0 feet. Both pits were the same depth, about 0.75 foot, although the central portion (where the two are assumed to bleed together) was only about 0.5 foot in depth.

In the southern pit, along its eastern edge, were many large (0.2 to 0.4 foot in diameter) lumps of what appeared to be swamp clay, gray to yellow in color with many organic root-like inclusions. Neither type of clay was found elsewhere on the site. Artifacts, besides the shovel and hoe, included Colono ware, bottle glass, and nails. These pits, designated Feature 2, have no clear function, although they appear to have been used as receptacles for trash after they were open. Situated the way they are at the southwest corner of the structure, they may represent animal "wallows," which had yard sweepings and other trash dumped in them afterwards.

Feature 8 is found in the northeast quadrant of 1430R910 and the northwest quadrant of 1430R920 at the base of Zone 1. The exposed portion of the feature, which measures 6.5 by 3.5 feet, is entirely situated under Structure 1. Given its size, this pit must have been excavated, and likely backfilled, prior to the construction of the house. The feature fill is a homogenous brown (10YR3/2) fine sandy loam. Toward the base of the pit there were several lenses of strong brown (7.5YR4/6), reddish yellow (7.5YR6/6) and very dark gray (10YR3/1) fine sandy clay. Also present in the fill were small brick fragments (these were typically small, under 1-inch in diameter, and their total weight was just 1 pound). Artifacts, while common, were all very small — as might be expected with yard trash being swept or thrown into an open hole. The absence of water lensing suggests that the hole was rapidly filled, although its original function is less clear.[6] In several areas the walls of Feature 8 reveal dense clay, suggesting that the pit may have been opened to mine clay, perhaps for daub, clay mortar, or pottery use. The lenses at the base of the pit, in fact, may represent the dregs or remnant spoil from clay extraction.

In sum, these block excavations begin to provide a detailed, and complex, picture of life at Crowfield's slave settlement. Structure 1 represents what might be called a fairly late structural type — probably frame built up on a sill laid over probably wood piers. The posited central chimney, which served to divide the structure into two bays, was likely built of wattle and daub, since no brick or mortar was encountered. Around the structure are several features which reveal activities at the site both before, and after, this building was constructed.

### Stripped Areas 2 and 3

Toward the end of our work at 38BK1011 we stripped two areas just east of 1420-1430R910-930. Our goal in both was to better understand the density of remains in what appeared to the site core. The first area, measuring 18 by 38 feet, exposed 684 square feet (Figure 20). The second, measuring 71 by 13 feet, exposed a total of 923 square feet. Both areas were flat shoveled, with features cleaned and photographed, but not further excavated.

Exposed by the mechanical stripping were two structures, designated Structure 6 (found entirely in Stripped Area 2) and Structure 5 (found in Stripped Areas 2 and 3). Structure 6 was revealed by a trench of brown sand and clay about

[6] Although such features are often called "trash pits" by archaeologists, this phrase reflects their final use. Relatively few people dig holes with the specific and sole intent to use them to dispose of trash. Most holes are dug for some other purpose and, once open, become convenient receptacles for trash. On rural plantations there are far too many other places that trash can be disposed of to warrant digging holes. For example, at 38BK1011, not only were the adjacent woods likely available to receive trash, but there were several swamp or low areas nearby.

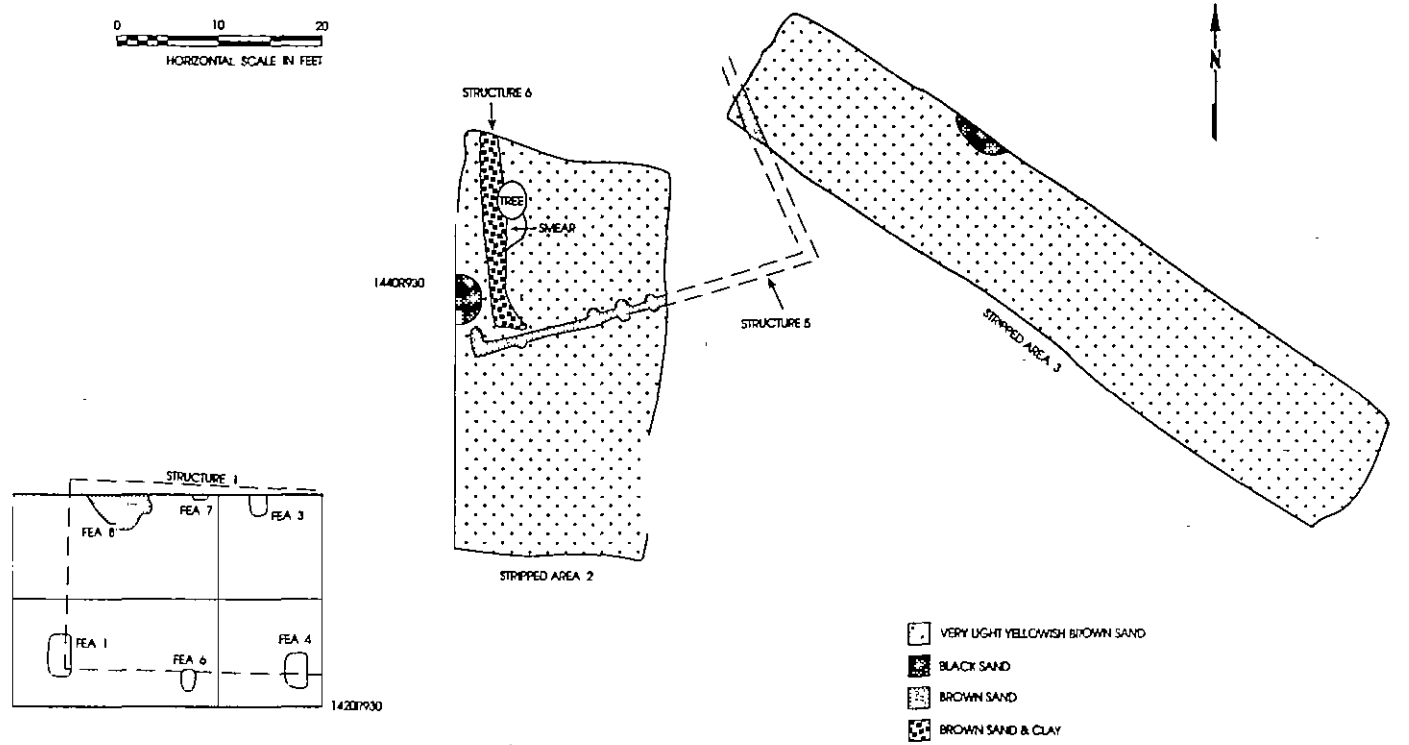



Figure 20. Structures 1, 5, and 6 at 38BK1011 in the 1420-1430R910-930 block and Stripped Areas 2 and 3.

2.5 feet wide. This trench was 20 feet in length, which what appeared to be a partial corner, turning to the east, at its southern end. Structure 5 consisted of a brown sand trench feature about 1.5 feet in width. The southwestern corner was identified in Stripped Area 2 and the southern wall was 35 feet in length. Along this trench were four clearly defined post holes. Although the southeast corner was not exposed, a portion of the eastern wall was found in Stripped area 3, revealing a wall length of at about 18 feet.

These two structures, in contrast to Structure 1, are characteristic of what others have called thatched or wattle and daub.[7] Although of different construction, Structure 5 is curiously about the same size as Structure 1, suggesting that double bay structures may not have been unusual at Crowfield. In addition, all three of these structures have different orientations, revealing that there were no orderly rows of slave houses at Crowfield during the early eighteenth century.

1430-1440R860

Webb and Gantt (1991:192) excavated their Unit 11 in an area reputed to have a high density of kitchen-group artifacts. It was reported to be have been placed at 1435R858, although our work found it at 1446.1R860.1. Other details concerning the excavation are equally unclear. For example, while the text reports that the unit was excavated to a depth of 16 inches, their drawing reveals a depth of only 12 inches. Upon uncovering the unit, which had black plastic at its base, we found that its depth was actually 0.8 foot (or 9½-inches).

They reported two features. One was a post hole about an inch in depth. A shallow hole corresponding to this post hole (and to their drawing of the unit) was found at the base of this square. The other "feature" was a "somewhat linear area extending north to south in the eastern half of the unit" (Webb and Gantt 1991:193). Once investigated they reported this to be a tree root. Nevertheless, once their unit was uncovered, we found that the excavated tree root was at the south, not east, edge of the unit and that it had been "excavated" using a 1 by 4.2 foot trench. It appears that Webb and Gantt's photograph of the unit (Webb and Gantt 1991:Figure 5.40) shows the root (before excavation) at the southern edge of the unit, with the post hole located as drawn and recovered by our work, so somehow the foot was drawn on the wrong side of the unit, while the post hole was correctly located.

They conclude that the unit was at the western edge of the slave village, "probably along the periphery of a domestic discard area" (Webb and Gantt 1991:198). Regardless, they recommended that a 20 by 20 foot block be excavated in this general area. Based on the nature of the finds, we reduced that recommendation to a maximum of 200 square feet.

Our excavations revealed a black humus, probably representing a modern A horizon, overlying a light brown sand, which probably reflects the old Ap horizon. At the base of the excavation, about 0.7 to 0.8 foot in depth, we found a mottled light brown sand representing the subsoil. In this subsoil were two distinct plowscars running north-south (Figure 21).

Artifact density in these units was low, much lower than found in the nearby 1420-1430R910-930 block excavation. Brick density was likewise reduced, with only 7 pounds recovered from the two units.

1430R1200

This unit was placed immediately west of Webb and Gantt's Unit 2, situated at 1430R1205. They observe that:

[7] Thatching usually entails attaching brush such as palmetto to horizontal posts. Wattling involves placing a series of primary support posts in a trench and "basket weaving" vines or other brush between the primary support posts and secondary support posts that are held upright in the weaving processes. Sometimes these structures are plastered over with a clay mixture known as daub, and are then called "wattle and daub" houses. Sometimes these types of structures are also called "wall-trench" houses.

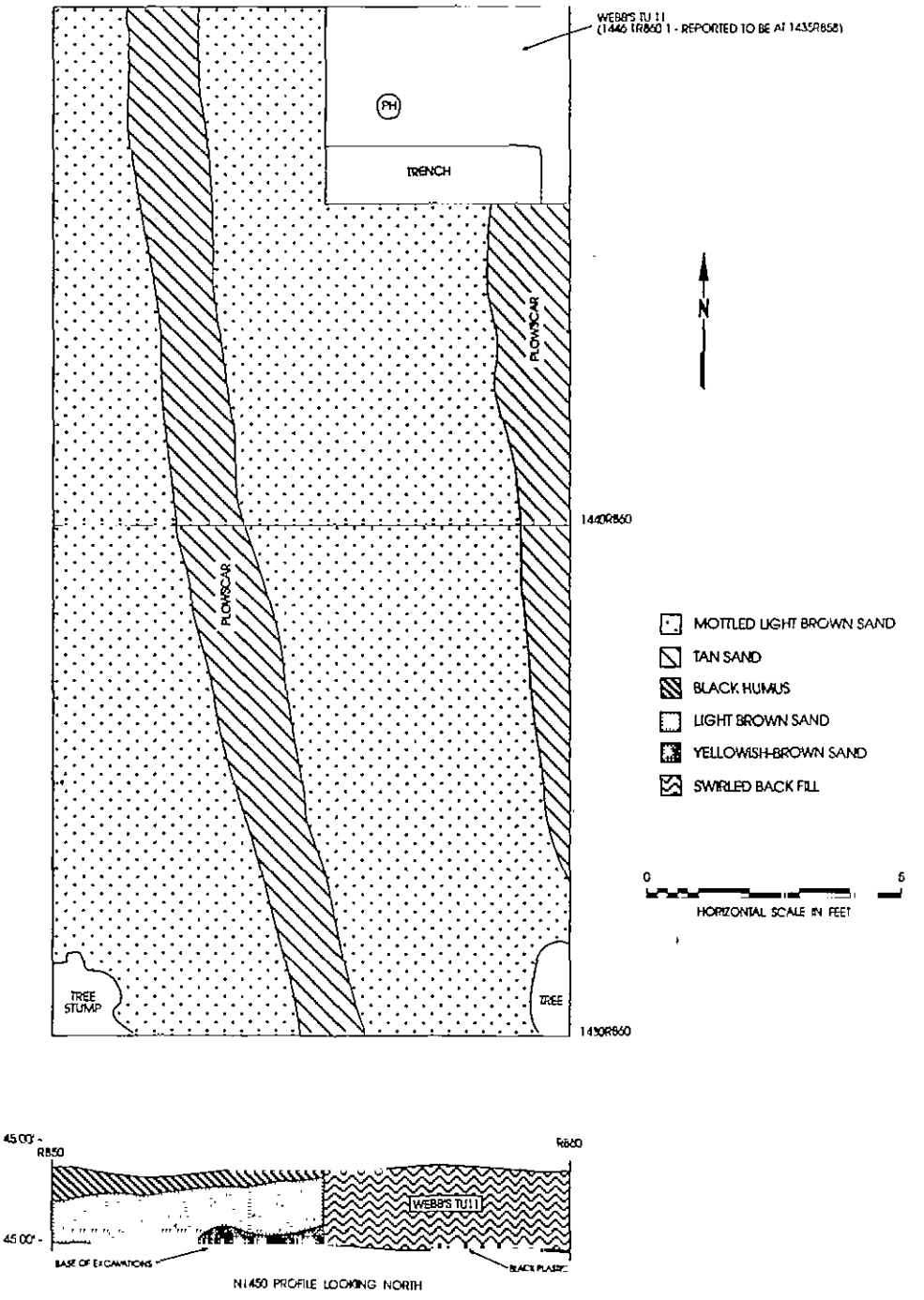



Figure 21. Excavations in 1430-1440R860.

> the recovery of 1.4 lbs. of brick, nail fragments, the high ceramic/glass yield and the lack of structure-related subsurface features suggest that Test Unit 2 was probably placed along the edge of a slave cabin, perhaps within an associated discard area (Webb and Gantt 1991:157).

They recommended that this general area, which also includes their Unit 5 (our 1350R1210), be further explored. We selected to place our unit to the west of theirs since the shovel test data suggest that the concentration is to west. The unit revealed a very dark gray (10YR3/1) humic sand about 0.2 foot in depth overlying a brown (10YR5/3) sand about 0.5 foot in depth. This graded into a light yellowish-brown (10YR6/4) subsoil (Figure 22). No evidence of plowing (other than the small size of the recovered artifacts) was found and the unit was barren of features.

The findings from this unit were modest. Artifact density was nominal and those present were highly fragmented. No features were recovered and only 2 pounds of brick were recovered (a significantly lower density than anticipated, based on Webb and Gantt's Unit 2).

1440R1040-1050

Webb and Gantt excavated their Unit 8 at 1450R1040 in order to explore an area of posited high kitchen artifact density. They found that the number of artifacts was quite high (30.4 $ft^3$), although very few were architectural. In addition, no features were recorded in the unit. These findings led Webb and Gantt to comment that the unit:

> was located in a discard area, probably near a slave cabin. The low frequencies of European wares, food bone and durable architectural artifacts suggest a generally poor socio-economic condition (Webb and Gantt 1991:182).

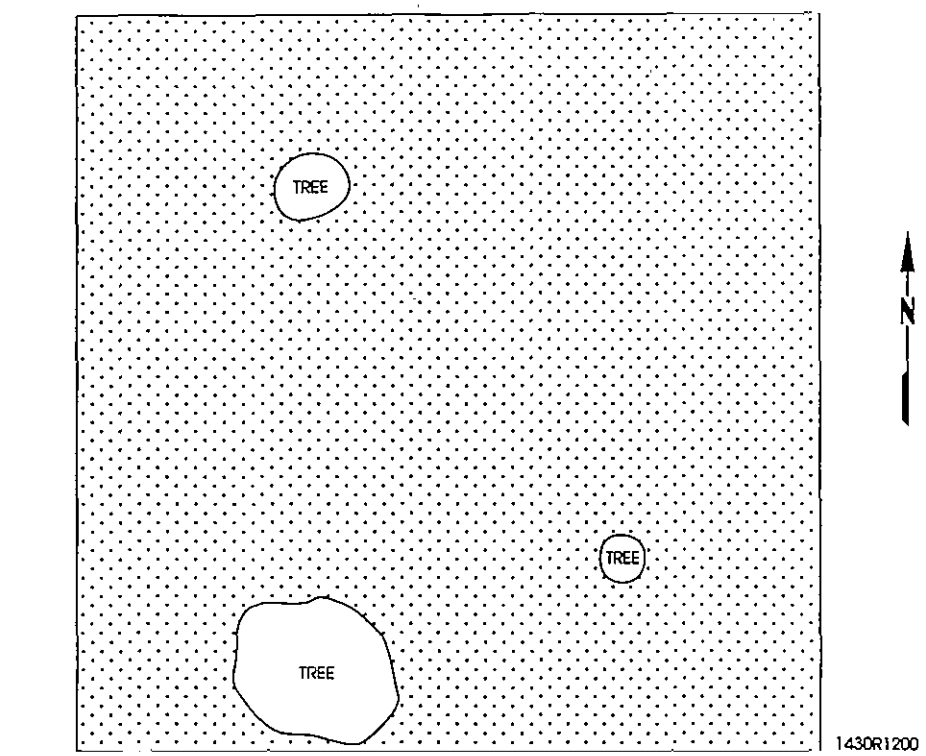
This was another area where they recommended the excavation of a 20 by 20 foot block, while our assessment was that about half that work would be adequate to sample the remains. Consequently, we opened two 10-foot squares, 1440R1040 and 1440R1050. Although Webb and Gantt's test unit should have been situated in the southeast corner of our 1440R1040, we found no evidence of backfill or the black plastic supposedly at the base of the unit (and, in fact, a tree in this quadrant would have made the excavation of the unit impossible).

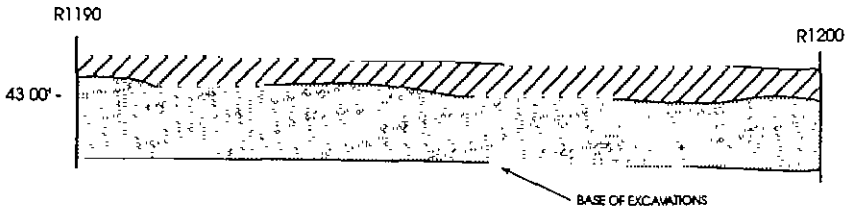
We found a very dark grayish brown (10YR3/2) sand about a foot in depth overlying either a heavily mottled yellowish brown (10YR6/4) or a light red (10R6/6) sand subsoil (Figure 23). We also observed a red (2.5YR6/6) clay dome in the northwest quadrant of 1440R1040, similar to the one observed in 1420R910-920. Zone 1 was clearly a plowzone, with north-south plow scars and ridges plainly visible at the base of the excavations. A single post hole, with a black (7.5YR2.5/1) sand fill was found in the center of 1440R1040.

In addition, we found remnants of what appeared to be an intermittent wall trench running east-west through the center of both units (see Figure 23). The fill was a dark brown (7.5YR3/3) sand and the trench averaged about 0.4 foot in width. It was not excavated and no feature number was assigned. This is referred to as Structure 7. There seems to be equal mottling north and south of this feature, so it is not possible to speculate on which side may have been within the structure. There did not seem to be any difference in artifact density from north to south, probably because plowing had homogenized the associated artifacts.

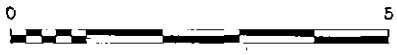
1450R900

Although this 10-foot unit was excavated in Webb and Gantt's Area 4-7, it was not placed in the immediate vicinity of any of their test pits. Situated just northwest of the 1420-1430R910-930 block and Structure 1, it was intended to explore artifact density in a yard area associated with a known structure. We hoped that the unit would not only reveal some evidence of yard activities (which were generally missing from Stripped Areas




N1440 PROFILE LOOKING NORTH



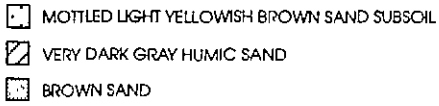




Figure 22. Excavations in 1430R1200.

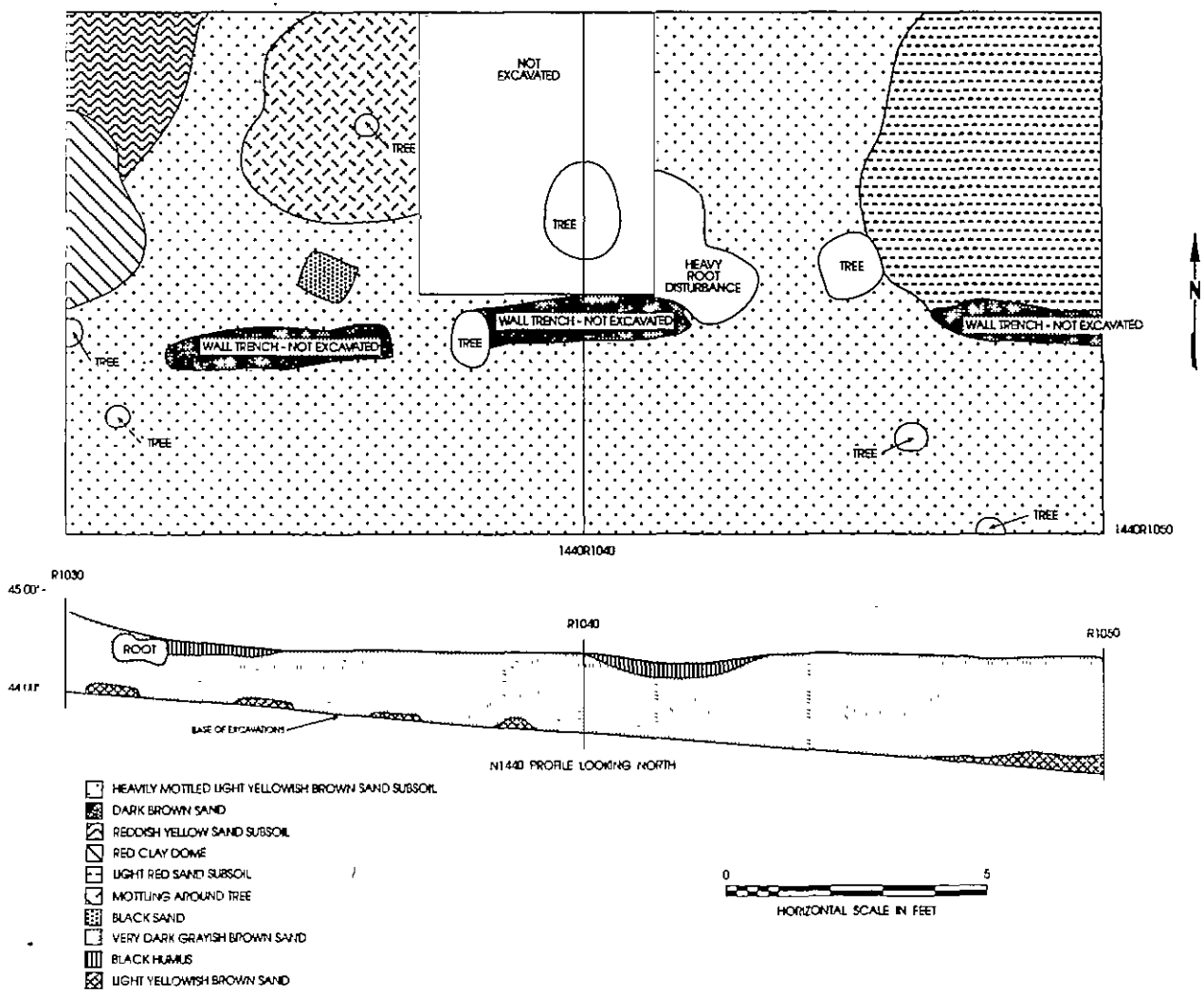



Figure 23. Excavations in 1430-1440R1050.

2 and 3 to the east), but that it would provide an indication of artifact density in near yard areas.

The unit revealed about 0.2 foot of recent very dark brown (10YR2/2) humic loam overlying 0.7 foot of dark yellowish brown (10YR3/4) sandy loam plowzone. At the base of the unit was a heavily mottled brownish yellow (10YR6/6) sandy clay subsoil (Figure 24). Several plowscars were found running east-west through the unit, although no features were present. Artifact density was appreciable lower than at the nearby block excavation, although the excavation did produce 4 pounds of brick rubble. The only real indication of possible yard activities was the exceedingly heavy mottling at the base of the plowzone, perhaps an indication of the activities which may have taken place in the yard of the slave settlement.

1520R1010

This 10-foot unit was situated in Webb and Gantt's Area 8, which was based on dense remains recovered from a shovel test at 1540R1000 (where 42 artifacts, including 37 Colono ware sherds, were recovered). Webb and Gantt had not investigated this area, which is on a north-facing slope. We hoped that it might reveal evidence of dumping activities, perhaps accounting for the high density found in the shovel test.

We found 0.2 to 0.3 feet of dark brown (7.5YR3/2) sand, probably reflecting a recent humus development, overlying brown (7.5YR5/3) sand. This lower zone, only 0.4 to 0.5 foot in thickness, probably represents an eroded plowzone remaining on the slope. At the base of the excavation was a yellowish-brown (10YR5/4) sandy subsoil (Figure 25).

Although 5 pounds of brick were recovered from this unit, artifact density was exceedingly low — much lower than anticipated based on the nearby shovel test. No features were encountered and we can only conclude that the shovel test was either a fluke or that it hit a feature.

1590-1600R910

Webb and Gantt excavated their Unit 14 about five feet north of this block at 1615R905. We were unable to find the unit because of extensive clearing and grubbing damage. Our excavations were placed in the least damaged portion of the site.

Webb and Gantt placed their unit to explore the edge of the slave settlement, in an area of relatively low artifact density (less than 10 specimens per shovel test). In the south wall of the unit they excavated what they described as a probable post hole. They also found what was described as "a linear area of dark brown (10YR3/3) sand with charcoal flecks extending from the west wall and covering almost two-thirds of the test unit" (Webb and Gantt 1991:217). They excavated a 1.5 foot wide "window" along the entire north wall. Afterwards they concluded that this was "root disturbance." Artifact density was very low (10.7/ft$^3$), but Webb and Gantt nevertheless comment that the unit was "located proximate to a slave dwelling" and that, "it is possible that Feature 1 [the post hole] represents the northern end of a structural trench within a slave dwelling" (Webb and Gantt 1991:220). As a result, they recommended 400 square feet of excavation in this general area, which we proposed to reduce by half.

Unable to relocate their Unit 14 because of construction disturbance, we established our excavation to the south by about 5 feet. Since they postulated that the slave house ran to the south, this was not seen as compromising the research effort.

The excavations revealed a black (10YR2/1) humic loam between 0.1 and 0.4 foot in depth overlying a brown (10YR4/3) sand about 0.3 to 0.7 foot in depth. The subsoil in this area of the site was a light yellowish brown (10YR6/4) sand, although there were areas of pale yellow (2.5Y7/3) sand commingled with extensive tree disturbances (Figure 26). Both the plan view and profile drawings reveal some of the disturbance the area had suffered a few months prior to our work.

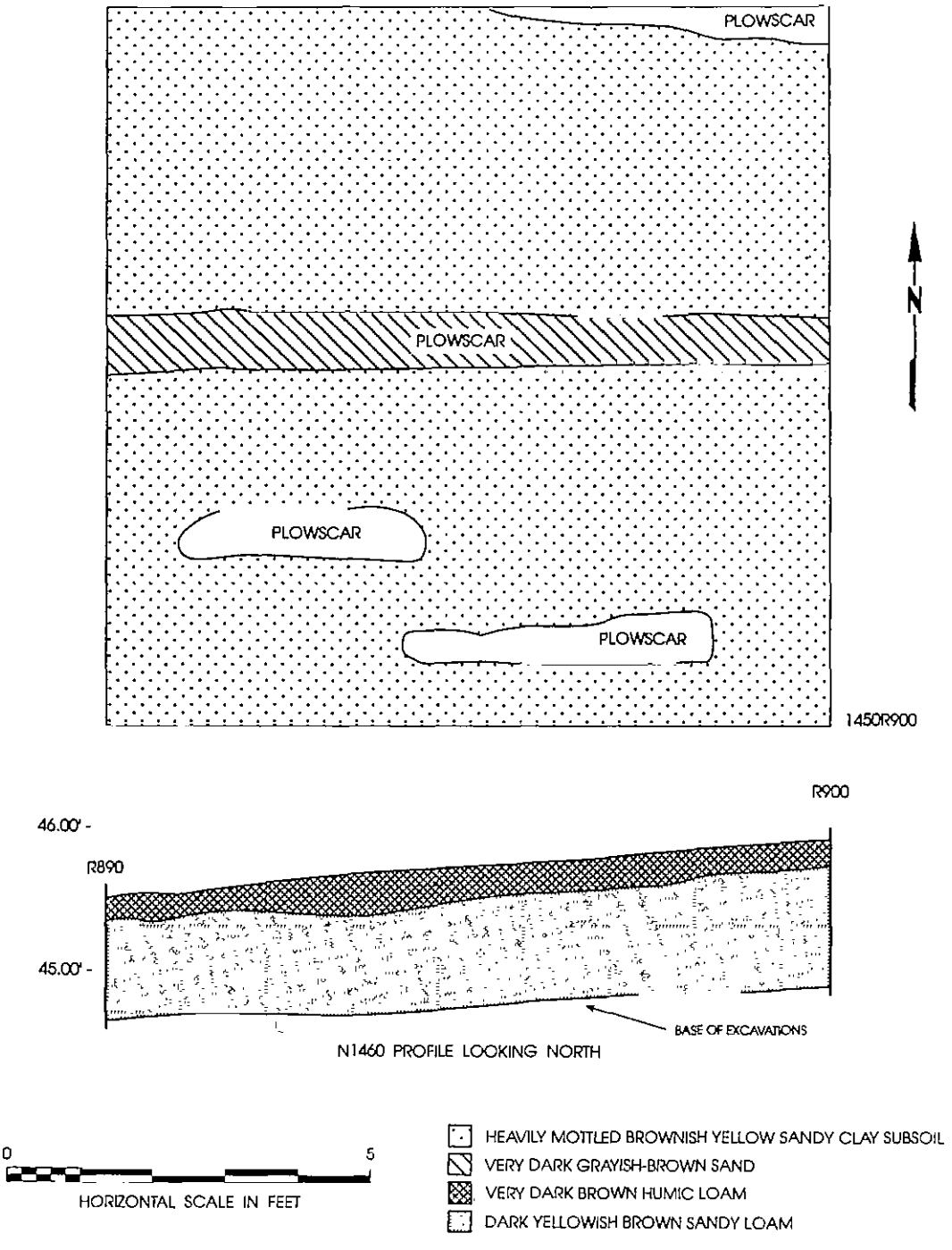



Figure 24. Excavations in 1450R900.

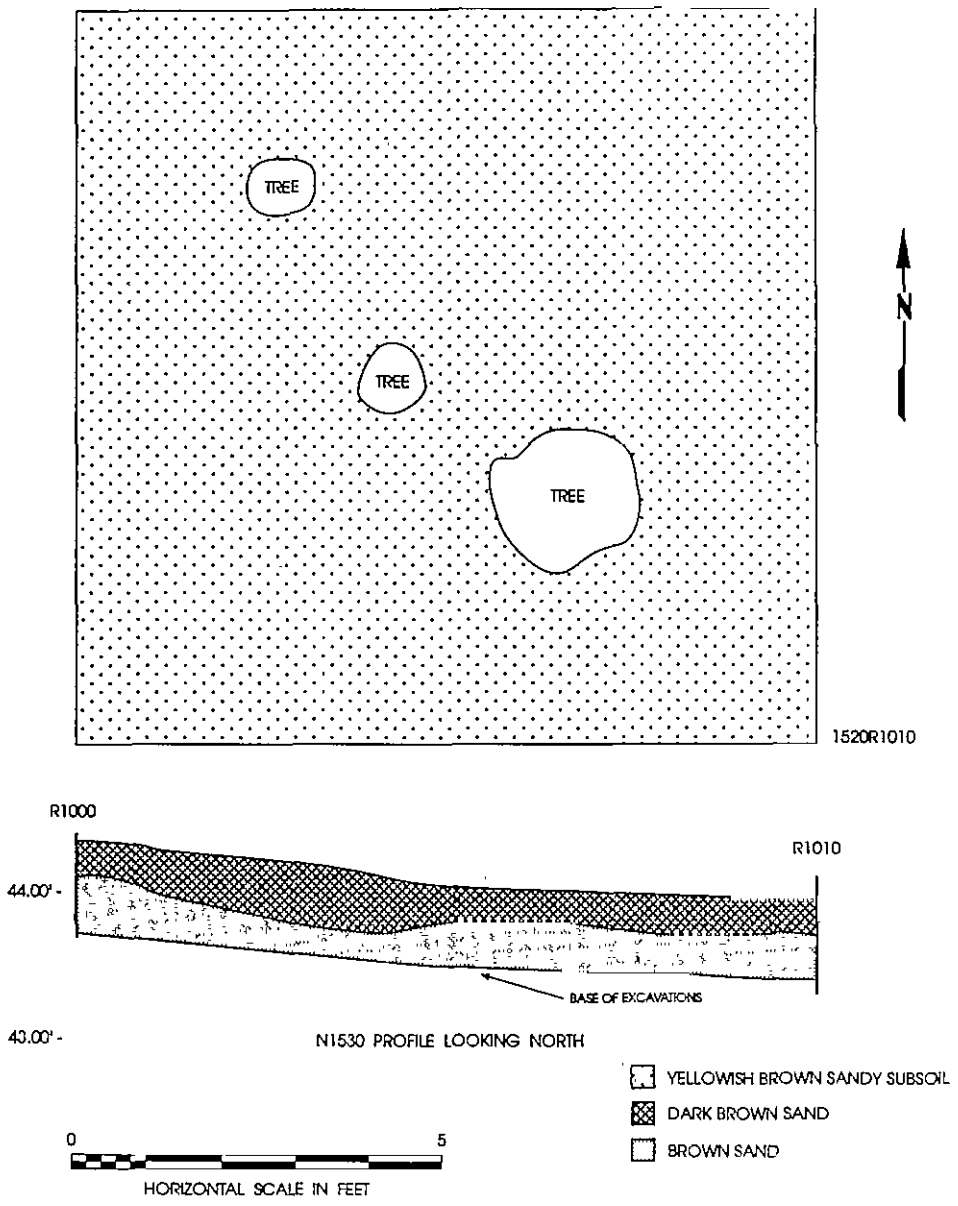



Figure 25. Excavations in 1520R1010.

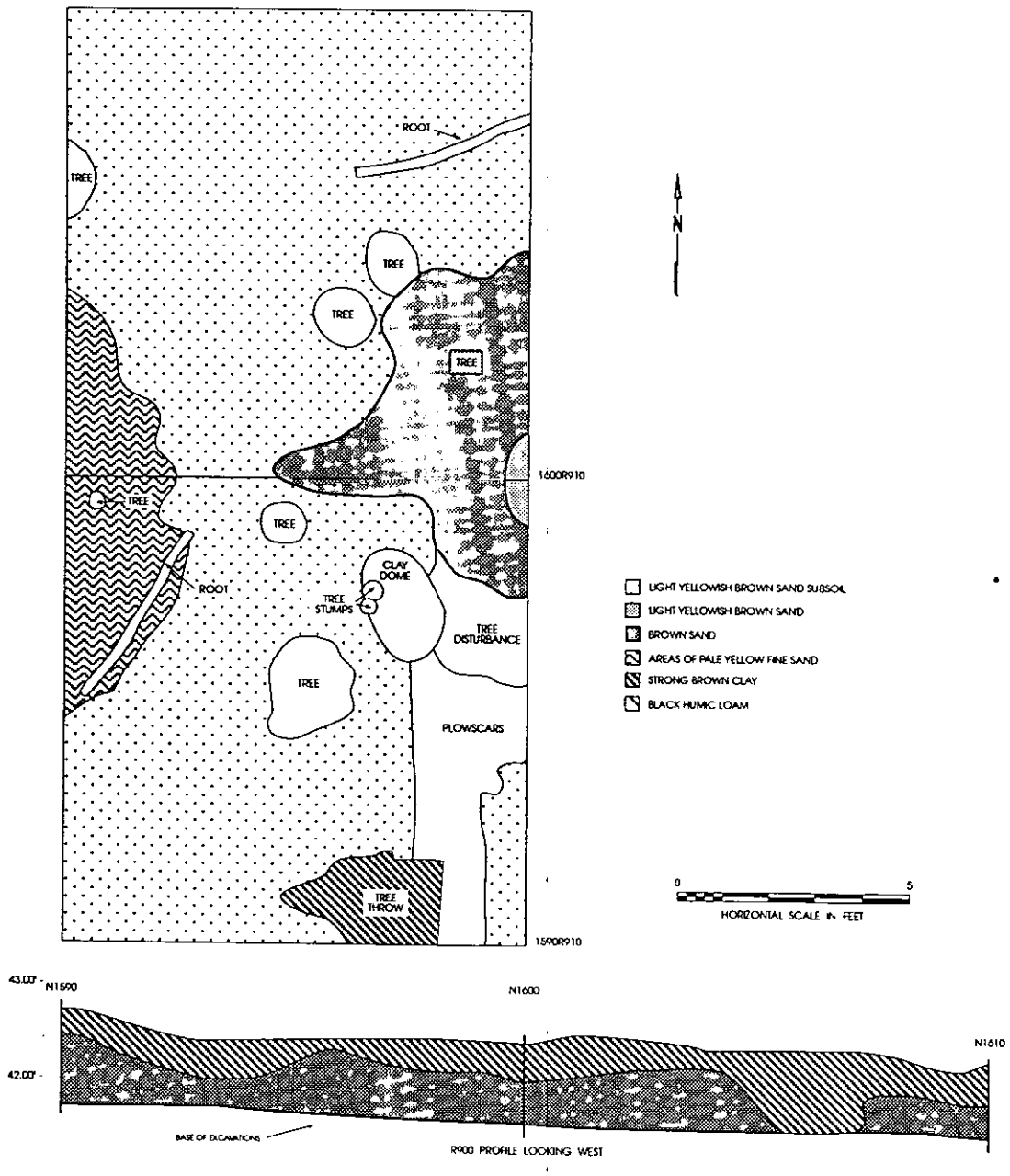



Figure 26. Excavations in 1590-1600R910.

Although a number of artifacts were found in the excavations, including a total of 18 pounds of brick rubble, no features were present. In addition, these excavations, on the western edge of a large low area, produced very wet soils.

1720-1740R910-920

Webb and Gantt excavated their Unit 15 in what was called Locus 9 to investigate a high density of brick recovered in shovel testing (Webb and Gantt 1991:198). Among the numerous root stains they also identified what was thought to be the northeast corner of a wall trench structure. This feature was found to be about 1.5 feet in width and 1.0 foot in depth. The trench had a flat base and angled sides (Webb and Gantt 1991:202).

Artifact density in this area was relatively low — only 7.3/ft$^3$. Webb and Gantt, however, note that the unit, compared to others they explored, produced "a significant amount" of architectural items, primarily nails. As a result, they recommended that this area receive a 40 by 20 foot block excavation. We concurred that this was likely a unit and deserved to be fully explored.

As a result, we began by laying in six 10-foot squares, 1720-1740R910-920 in the general area of the posited structure, although construction activities in this area prevented us from initially identifying Webb and Gantt's unit.

We encountered a black (2.5YR2.5/1) humic loam about 0.3 foot in depth overlying about 0.6 foot of very dark gray (10YR3/1) sandy plowzone soils. At the base of the excavations was a mottled light yellowish-brown (2.5YR6/4) sandy subsoil. The only significant variations were found in the northern units. Square 1740R920 revealed an area producing dense red (2.5YR5/8) iron concretions and units 1740R910-920 bisected an area of brownish-yellow (10YR5/4) clay surrounded by a mottled pale brown (10YR6/3) sand (Figure 27).

The units revealed several tree stains or smears, as well as several plowscars tending northwest-southeast. In addition, we found evidence of two different structural wall trenches, designated Feature 5a and 5b. The fill was a brown (10YR5/3) sand which was well-defined against the lighter subsoil in all areas except in 1720R910 where the two features and a plowscar commingle. That area was gradually interpreted as the different stains were excavated. The trench varied from about 1.0 to 1.6 feet in width and generally has straight sides and a flat bottom. The depth varied from 0.45 to 0.55 foot. Only one distinct post hole was encountered in the trench, at 1731R913. It was 0.8 foot square with a flat bottom and was excavated 0.4 foot below the base of the trench

The bulk of the trench is associated with Structure 5 and only a short segment of trench is present from Structure 4.

Stripped Area 1

Unable to fully expose Structures 2 and 3 in the previously discussed block excavation, we decided to mechanically strip an area adjacent to the excavations in order to expose at least the northeast corner. This would allow us to determine the length and width of at least Structure 2 and might assist in identifying additional sections of Structure 4.

An area measuring 13 by 39 feet (507 ft$^2$) was opened using a small bulldozer. During this stripping we encountered a mass of brick in the northern half the open area. This necessitated suspending the mechanical excavation and the rest of the work was accomplish by hand. In the process of this work we also discovered Webb and Gantt's Unit 15, which was actually located at 1752R924.2. This area was incorporated to the stripped section, resulting in a total of 532 ft$^2$.

We were confronted with a number of stains, as well as the brick mass. Beginning with Webb and Gantt's original unit we determined that the posited corner they encountered actually represented two different structure (see Figure 28). Toward the north wall of their unit they had identified a portion of the northern wall for Structure 2, while along the eastern side of the unit the stain they found was actually a wall trench associated with another building, which we have

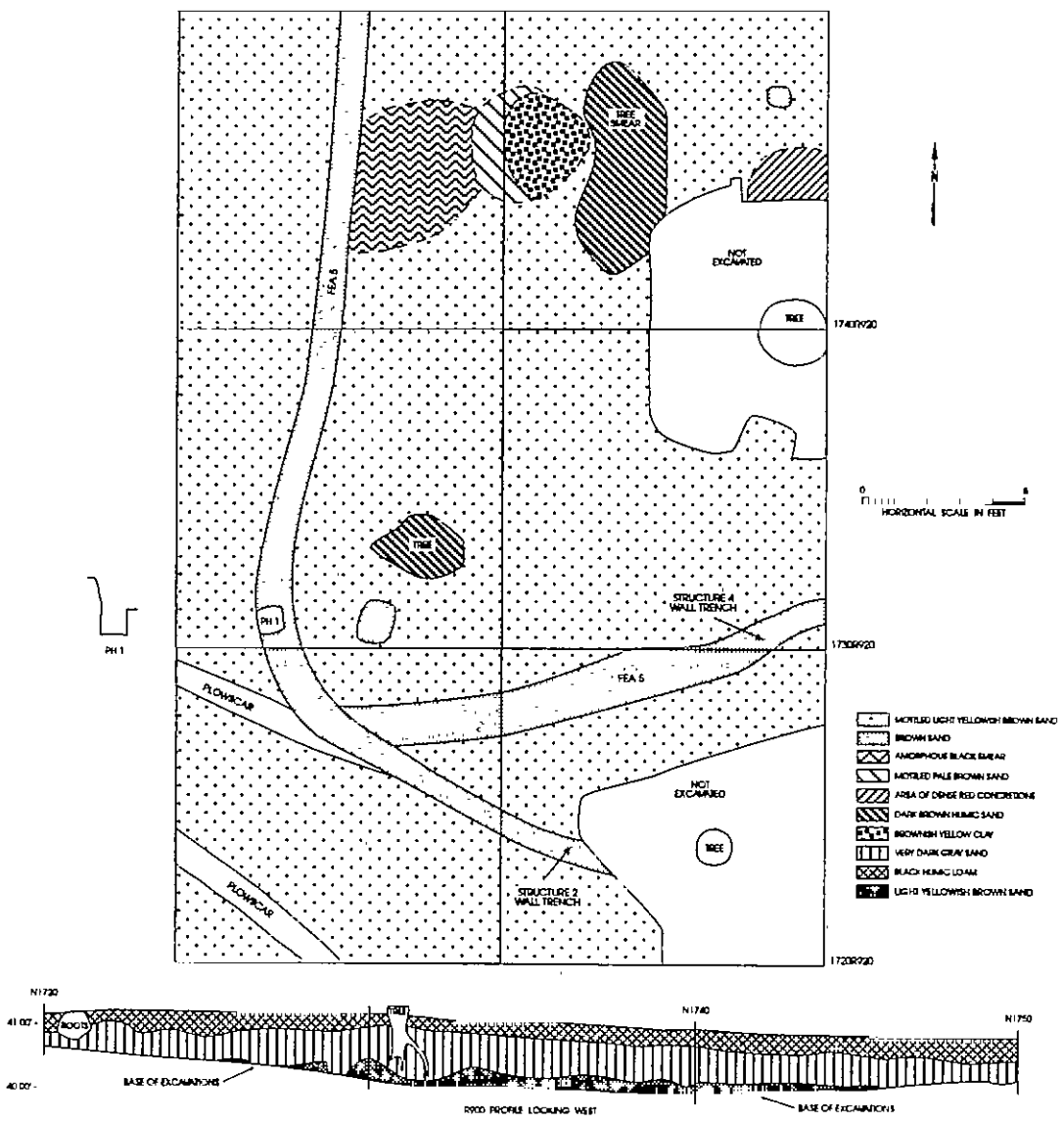



Figure 27. Excavations in 1720-1740R910-920.

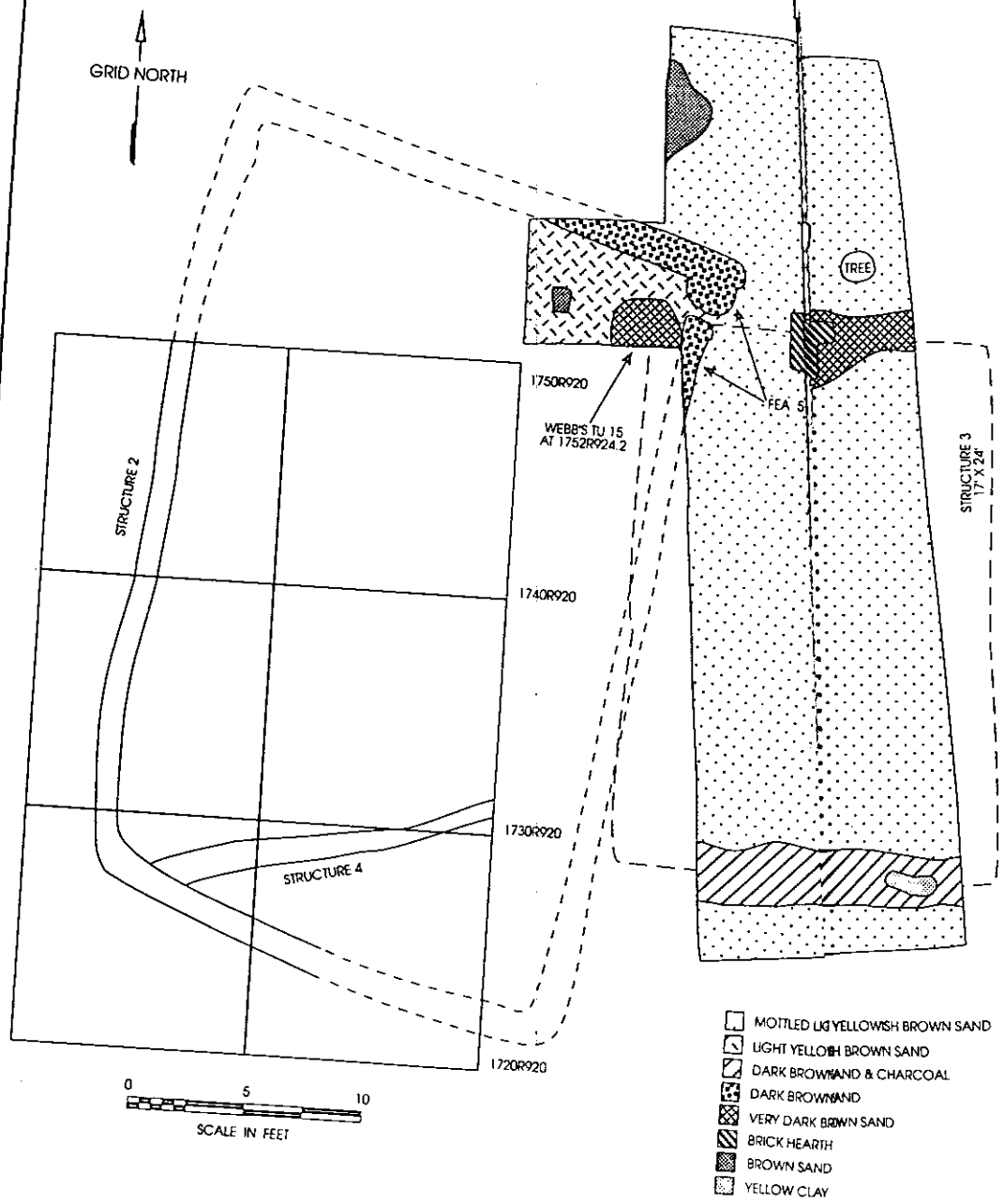



Figure 28. Structures 2, 3, and 4 in the 1720-1740R910-920 block excavation and Stripped Area 1.

designated as Structure 3.

The stripped area did expose a small portion of the eastern wall for Structure 2, allowing us to determine that it measured 33 feet in length and 20 feet in width. Figure 28 reveals that the structure is slightly misshapen or out of square. This suggests that only minor care was taken to lay out and build the house. There is also no indication of a chimney and, typical of such structures, we imagine that cooking activities were conducted in the yard. Curiously, this structure is significantly larger than those previously reported, providing 660 ft² of living space. We imagine that it was divided with a central partition, creating two rooms, each about 330 ft². Although the dimensions are different from previous structures, this floor area is similar to that of the Lesesne house (Zierden et al. 1986).

The stripped area failed to reveal any further evidence of the wall trench comprising Structure 4. It did, however, reveal the northwest corner, a portion of the north wall, and the south wall for Structure 3. This, too, was a wall trench building. The southern trench, 2.5 feet in width, consisted of dark brown (10YR3/3) sand with charcoal. Also present was an area of yellow (10YR7/8) clay, perhaps representing a portion of a clay dome disturbed by the trench construction. The northern and northwestern trenches ranged from 1.5 to 3.0 feet in width and consisted of very dark brown (7.5YR2.5/2) sand.

The measurements for Structure 3, 17 by 24 feet, are large for a wall trench building and there is no evidence that it had a dividing partition. In fact, the presence of a brick hearth (designated Feature 9) at the north end strongly suggests that it was intended to be occupied by a single family.

Feature 9 measured 5.0 feet in length and 2.5 feet in width and was oriented N12°E. It was constructed almost entirely of brick fragments, typically half bricks. We found evidence of mortar on only one brick, suggesting that these bricks were not salvaged from other construction, but were probably discards — bricks broken in the process of forming corners and which would otherwise have been discarded. They were set into a thick gray-brown clay, similar that found in the swamps around Crowfield (and very dissimilar to any of the clay domes or clay subsoil revealed by these excavations).

Structure 3 is an interesting "hybridized" building representing a combination of traditional African wall trench (or wattle and daub) construction into which a European hearth and chimney had been cast. This structure may reveal the transition from primarily African building techniques to primarily European techniques.

# CONCLUSIONS

**Evaluation of Proposed Goals**

Seven broad research topics were previously outlined for the Crowfield research. While all of these cannot be evaluated since the analysis of the collections has not been completed, we are in a position to offer general observations.

Period of Occupation

The first research question involved the time span of the slave settlement at 38BK1011. The current investigations have produced a fairly large assemblage from this site (approximately 8 $ft^3$) and there is no evidence of occupation past the third quarter of the eighteenth century. As observed by Webb and Gantt, the Crowfield settlement extended into the nineteenth century – it seems obvious, however, that the settlement at 38BK1011 had been abandoned by about the time of the American Revolution.

Curiously, it is about this time that the historical documents suggest Crowfield began its decline. In 1776 the then owner, Samuel Carne, left South Carolina, selling Crowfield to Rawlins Lowndes. Lowndes wealth declined precipitously and it is likely that Crowfield was reduced in size and profitability.

Intra-site Patterning

The second research question involved recovery of intra-site patterning at 38BK1011, with specific interest in understanding structure orientation and patterning, as well as yard activities. In addition, an interest was expressed in exploring the main plantation settlement, since this was one of the few studies incorporating a main plantation distinct from the area around the main house.

Our research in this area is especially valuable. At 38BK1011 we found that while the structures did *tend* to follow the natural topography of the project area, there were a variety of structural orientations. There does not appear to any organized pattern and certainly nothing approaching the organized rows of the nineteenth century.

The apparent absence of pattern, however, must be cautiously interpreted. We also observed several instances of rebuilding and in virtually every case this rebuilding was on top of a previously existing structure. The failure to move away from previously occupied areas, of course, may be related to a number of factors – new areas might have required greater clearing efforts, expansion of the settlement into new areas may have been prohibited by the master or his overseer, or expansion of the settlement might have disrupted bonds within the community. Whatever the reason, the slaves at Crowfield tended to build, and rebuild, within a fairly circumscribed village area.

We were somewhat less successful in our quest for evidence of yard use. The features we encountered were almost exclusively situated in near proximity to structures. Where we exposed large areas through stripping we found no evidence of hearths or other activities. We did encountered what appears to be an animal pen at the extreme southern end of the settlement, and this may represent some internal arrangement within the village as a whole.

At 38BK103 we also found a tendency to rebuild on top of previously constructed buildings. Like the slave settlement, it seems that space would not have been at a premium on the plantation and rebuilding would have moved to new locations in order to minimize the cost of cleaning up old structures. Here there may have been a functional reason for use of existing space, perhaps the road network would also have required changing if the barn location were varied or

perhaps the plantation organization was more important any minor savings in slave labor effort. Regardless, the consist re-use of space may help us better understand plantation development.

It is also informative to examine Crowfield in its entirety (Figure 29). Several features are immediately obvious. The first is that with some minor variation, the entire complex is oriented north-south. The main house and flankers, the gardens, the water devices, the main entrance road, the barns, all of the small subsidiary structures, and the slave houses are oriented somewhere between due north-south and about 5° west or east of north.

Assuming that this consistency in orientation is not a fluke, how do we explain the variation? The techniques of the time certainly allowed for greater accuracy, but was improved accuracy necessary? Probably not. The casual viewer of Crowfield likely walked away with an impression of order and consistency. Any greater planning efforts would likely have been overkill.

Another immediate observation is that the main settlement is situated on lower topography than the slave settlement. In effect, it is not the house on the hill overlooking the slaves, it was slaves who overlooked the main house — by as much as 12 feet. This reversal of the posited norm may imply that the norm is faulty or that other factors directed the design of Crowfield. We believe the latter is more likely the correct explanation.

Water was an important — even essential — ingredient in the Crowfield main plantation setting. It is found in the Moon Pond, as well as in the rectangular lake and holding ponds at the rear of the formal gardens. It is also likely that on the east side of the garden there were at least a few vistas that incorporated the vast inland rice fields of the plantation. The planter associated himself with the power of the water, and his ability to control that water reaffirmed his power. This, of course, was not possible at the higher elevation. In a strange twist, therefore, Crowfield's main settlement occupies some of the less desirable and less healthy land, while the slave settlement is far better situated.

Another observation is that the highest point of ground — 46 feet AMSL — seems to anchor the southwest corner of the slave settlement. The settlement extends down the eastern slope and down the northern slope. It does not, however, extend to west. And to the south there seems only to have been the animal pens.

This arrangement seems to bracket the low ponded area separating the slave settlement from the main house. If we are correct, even the slave settlement was oriented to take into account a water feature. Although its purpose is not as clear as with the main settlement, we believe that there is a landscape association.

Even this brief overview, we believe, reveals some of the complexity of the Crowfield plantation landscape. It also clearly reveals the importance of exploring, and understanding, the entire plantation landscape.

## Dietary Reconstructions

Our goal of exploring slave subsistence is unlikely to be realized. Our excavations produced very small quantities of faunal material. Ethnobotanical remains, while present, do not appear to contain abundant food remains — most appear to represent wood charcoal.

We have collected a number of samples for both pollen and phytolith studies and are hopeful that these may be useful in several ways. The phytolith samples may be particularly useful in identifying the presence of grain crops, such as rice. The pollen samples, while shown at Stoney/Baynard to be useful in the identification of food plants (see Cohen 1995), may also help us better understand the micro-environment of the Crowfield settlement and these data will be interpreted in the context of intra-site patterning as well as dietary reconstruction.

Finally, we also sought to explore the use of food residue analysis. Evans (1990) provides excellent introductory comments and Rottländer

(1990) provides a protocol for lipid analysis in archaeological collections. At present, however, we have failed to identify appropriate sherds with good evidence of interior charred materials. The collection is still being analyzed and it is possible that materials will be encountered.

Social Stratification

A fourth goal was that of identifying social stratification in the slave settlement. This would involve comparing the assemblages from distinct structures in the hope of discerning differences in the types of artifacts present, differences in the proportions of different artifact classes, or perhaps differences in the ecofacts (such as cuts of meat). Obviously faunal analysis will not be of assistance in the exploration of this topic.

In addition, we are now aware that there ha been extensive rebuilding in several excavation areas. For example, Structures 2, 3, and 4 lay on top of one another, with the presumption that the artifacts from each of these three episodes have probably been commingled. Likewise, Structures 5 and 6 were build on the same piece of ground. Only Structure 1 appears alone in the archaeological record.

As a consequence, it will not be possible to conduct this type of study, except at the most general level. We do anticipate exploring the artifact assemblages on a block-by-block basis and hope to distinguish some differences. We recognize, however, that it will be very difficult to interpret the meaning of any observed differences, given the site formation processes present at Crowfield.

Structural Reconstructions

The goal of exploring the nature of the slave structures at Crowfield can easily be met by the available data. We have found portions of seven different structures in three different site areas and of these all can be identified to construction technique and three can provide dimensional information.

Perhaps most importantly, Crowfield has provided us with a significantly increased range of building styles and sizes associated with eighteenth century slavery. We no longer can view "wall trench" or "wattle and daub" structures only in the context of the formative work at Yaughan and Curriboo. Just as that early work revealed new and unexpected architectural styles, Crowfield has revealed that the range is much greater than anticipated.

Structure 3 at 38BK1011 may also represent the transition from African-dominated slave architecture to European-dominated slave architecture. The presence of traditional wattle and daub construction techniques incorporating a rudely constructed hearth suggests that the change was slow and incorporated some degree of experimentation.

This work is also cautionary, since it should demonstrate to other researchers that they must be attentive to a wide range of features and contexts. It also reveals that wide spread use of site stripping as a data recovery technique may prevent us from understanding the complexities of the archaeological record.

Interaction of Slave and Owner

Of all the research questions proposed, this is without doubt the most complex and difficult to evaluate. Webb and Gantt observed, and we have provisionally confirmed, that the range of slave artifacts is limited — European ceramics are rare, architectural remains are generally limited to nails, personal goods are exceedingly scarce, and clothing items are more limited than would be expected. Questions have even been raised concerning the possible re-use of tobacco pipes, suggesting that even these artifacts were in low supply. Webb and Gantt explain the impoverished collection by noting that the owner "severely deprived the slave population through neglect, absence, poor management and/or ignorance" (Webb and Gantt 1991:214). While correct as far as it goes, we believe that the assemblage from Crowfield may be even more telling, demonstrating for us the early stages of black-white relations in Carolina as slave and owner attempted to establish the parameters of

their interactions.

Our exploration of this research will not only build on discussions in our earlier work at Broom Hall, but will incorporate research at other early eighteenth century slave settlements.

The Nature of Colono Wares

This last research goal was first explored in our Broom Hall research (Trinkley et al. 1995) with Dr. Michael Smith at the University of North Carolina - Wilmington. Our goal is to expand the research of Colono ware pottery, incorporating traditional typological analyses with petrographic and chemical studies.

The Crowfield collections are well suited to this undertaking. Not only do we have an exceedingly large collection of Colono ware material, but we have collections from around the main house, from a utility portion of the main settlement, and from the slave settlement. Although the pottery is highly fragmented, we are finding a wide range of vessel forms and styles. A number of appendages have been identified and we are also identifying several forms of surface treatment and/or decoration.

**Suggestions for Future Research**

While most of our comments on the course of future research must wait until the analyses are complete, there are two issues which are clearly apparent even now.

The first involves the nature of testing projects. Webb and Gantt (1991) no doubt made every effort to conduct detailed, careful studies. Yet some might criticize their research as flawed by inaccurately located units, incorrectly drawn plans and profiles, curious field methodologies (such as not screening excavated feature fill), poorly interpreted features, and a general lack of knowledge concerning similar sites.

Perhaps of even greater concern was how Webb and Gantt seemed predestined to interpret every stain as a feature and every feature as a structure. Beyond that, a tremendous amount of interpretation was drawn from very limited testing. Many of their "conclusions" would be better characterized as "speculations." By failing to explore all the different scenarios which might explain the data, Webb and Gantt create a false sense of certainty which may be misleading to other researchers, regulatory agencies, and even the client.

Testing such as was conducted at Crowfield can be very useful in evaluating site boundaries, identifying structural areas, and guiding future work. It is not, however, particularly useful in answering substantive research questions. In fact, such testing usually creates far more questions than it answers.

In sum, our experience comparing testing data with excavation data from Crowfield suggests that testing should be conducted with as much rigor as data recovery and every effort should be made to ensure the highest professional standards. To do less is to seriously compromise our ability to understand the past.

This research also made it obvious that our initial reluctance to engage in large scale site stripping was appropriate. Certainly we wish that we had been able to open additional ground, to more completely explore the seven structures at 38BK1011, and to find additional structural evidence. But while stripping *might* have allowed additional exposure, it would have been at a tremendous cost — the loss of essential archaeological data.

At 38BK1011 stripping would have removed at least 90% of the collection. The general paucity of yard features, combined with the low density of remains in the structural features, would have resulted in a rather meager report. In fact, of the posited research questions only two — site patterning and structural reconstructions — could be addressed. And even here our research would be hindered. For example, the brick hearth at Structure 3 would have been stripped away, leaving only a smear of brick that might be interpreted as just about anything (or totally ignored). Many of the features are so ephemeral

that they might even have been lost in a careless stripping effort.

Stripping is cheap, but researchers should remember that as a general rule, you get what you pay for. While stripping may be appropriate under some circumstances, it seems hardly ever appropriate for data recovery at a plantation. We can imagine that this will certainly be disputed, but recent research at Crowfield, combined with studies at other plantations, such as Whitesides (Trinkley and Hacker 1996), reaffirms our belief that only hand excavations are appropriate for most studies.

Finally, the last observation is that our understanding of Crowfield is much better for having the ability to explore the settlement in detail. The combination of the main house, near house landscape, utility buildings area, and slave settlement provides a perspective which would likely be missed if only one or two areas received study — or if the studies were done in isolation of an overall perspective.

The plantation operated as an integral whole. To understand its place in eighteenth and nineteenth century society, it seems obvious that it should be studied as a whole. Yet there are far too many studies which focus only on the obvious, or fail to fully explore the plantation complex. We first expressed this concern six years ago (Brooker and Trinkley 1991), yet there are still many studies which mention main houses or a few slave houses as though that was all the plantation consisted of. Such casual research is stifling our ability to truly understand the complexities of Carolina plantations.

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